# 4. Existing Conditions

One of the basic tasks in a master planning effort is to document existing conditions. We must know what we have before we establish what we need. This chapter summarizes extensive documentation of the State's Augusta physical resources.

# A. General Conditions

# **Current Agency Distribution**

The distribution of State Agencies and employees in Augusta area buildings as of early 2000 is summarized in the following:

East Campus En		Employees
AUG031	Marquardt Building	143
	ACE Service Center	28
	Mental Health	115
AUG015	Deering Building	118
	Agriculture	72
	Worker's Compensation	46
AUG012	Harlow Building	100
	Conservation	
AUG019	Ray Building	290
	Conservation	20
	Environmental Protection	270
AUG016	Tyson Building	37
	Corrections	37
AUG002	Old Max	60
	Human Services	
AUG070	Upham Building	50
	Environmental Protection	
AUG018	DEP Response Building	20
	Environmental Protection	
AUG069	Williams Pavilion	4
	Mental Health	
AUG037	Greenlaw Building	84
	Mental Health	30
	Mental Health (Regional)	54
AUG 017	Nurses Building	52
	Mental Health	3
	Mental Health (Regional)	36
	Labor	13
AUG068	Elkins Building	5
	Mental Health	
	East Campus Total	: 965

AUG122 1	Intomology Lab/50 Hospital Street  Conservation 59 Hospital Street  Conservation  Medical Examiner/34A Hospital St.	8 12 3
1.	Conservation Medical Examiner/34A Hospital St.	
AUG091 <b>N</b>	*	3
	AG - Medical Examiner	J
AUG090 S	tate Crime Lab/34 Hospital Street  Public Safety	20
AUG082 P	ublic Safety/36 Hospital Street  Public Safety	70
AUG047 N	Notor Vehicles Building Secretary of State	287
V	A Togus (leased)	28
	Mental Health	4
	Labor	24
AUG005 2	4 Stone Street (leased)	26
	Human Services	12
	Worker's Compensation	14
	East Side Total:	450

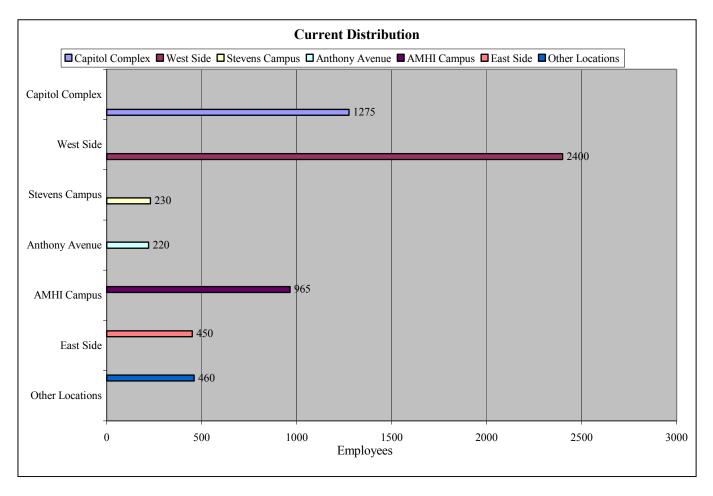
Capitol	Complex	Employees
AUG043	State Office Building	750
	DAFS	207
	Attorney General	143
	Economic & Comm. Development	46
	Education	180
	Capitol Security (Public Safety)	10
	Corp. & Elections (Sec. of State)	45
	Office of the Treasurer	19
	Future Positions	100
AUG066	State House	415
	Legislators	188
	Legislative Staff	200
	Governor's Office	27
AUG065	Cultural Building	103
	Library	62
	Museum	24
	Archives	17
AUG042	Nash School	8
	Secretary of State	•
	Capitol Complex Total:	1,275

West Side	Employees	
AUG010 55 Capitol	23	
Historic Preservation	10	
Maine Arts Commission	13	
AUG093 Motor Transport/105 Capitol Street Transportation	98	

AUG007	151 Capitol Street (leased)	135
	Human Services	
AUG060	157 Capitol Street (leased)	105
4110004	Human Services	
AUG004	219 Capitol Street (leased)	107
AUG040	Human Services	20
AUG040	Gannett House/184 State Street	28
AUG026	State Planning Smith House/187 State Street	20
710 0020	State Planning	20
AUG026	Merrill House/189 State Street	10
	State Planning	10
AUG056	McLean House/193 State Street	10
	Public Advocate	10
AUG039	221 State Street	251
	Human Services	
AUG058	242 State Street	63
	Public Utilities Commission	57
	Ethics	6
AUG126	284 State Street	70
	Inland Fisheries & Wildlife	
	283 State Street (leased)	11
	BMV (Sec. of State) (regional)	
AUG023	20 Union	180
4110020	Labor	
AUG038	DOT Building/1 Child Street	595
	Transportation	250
	26 Edison Drive (leased)	378
AUG115	DAFS (MRS/BIS)  16 Edison Drive (leased)	6
	Public Safety	U
	331 Water Street (Gardiner, leased)	28
	Human Services	20
	Labor	8
	323 State Street (leased)	5
	Labor	
AUG119	397 Water Street (Gardiner, leased)	88
	Public Safety	
	249 Western Avenue (leased)	185
	Human Services	
	West Side Total:	2,400

Stevens	Campus	Employees
AUG099	Flagg/Dummer Building	39
	Audit	
AUG095	Cleveland Building	16
	Human Rights	
AUG089	Baker Building	28
	Marine Resources	

AUG087	Administration Building	20
	Marine Resources	14
	Conservation (regional)	6
AUG098	Farewell Building	19
	Corrections (Pre-Release)	
AUG104	Reed Auditorium	30
	DAFS (Copy/Mail)	
AUG094	Central Building	77
	Labor	
	Stevens Campus Total:	230
Anthon	y Avenue	Employees
AUG006	2 Anthony Avenue (leased)	44
110 0000	Labor	44
AUG003	35 Anthony Avenue (leased)	175
	Human Services	1/3
	Anthony Avenue Total:	220
	Tilling Tivenue Total.	220
Other L	ocations	Employees
AUG117	10 Water Street	32
	DAFS (Alcohol & Lottery)	
AUG110	18 Meadow Road (leased)	36
	Public Safety	
AUG116	765 Riverside Drive	8
	Public Safety	
AUG109	Leighton Road	12
	Transportation	
AUG096	122 Northern Avenue (Gardiner,	162
	leased)	
4410000	Professional & Financial Reg.	
AUG009	2 Bangor Street (leased)	89
	Professional & Financial Reg.	66
ATTCOOO	Human Services	23
AUG008	73 Winthrop (leased)	28
AUG014	Human Services	0.2
AUG014	Witten Road (leased)	93
	Human Services	. 460
	Other Locations Total	: 460
	Tetal E 1	. (000
	Total Employees	: 6,000



# Cultural Factors: social and historical elements

Like many Maine communities, Augusta is built on a history of different cultures. Beginning with native Americans and continuing with English settlers beginning in 1628, sprinkled with French influence from the 1600's, assimilating French Canadian families around the turn of the century, and reflecting a variety of other ethnic groups during the City's industrial heyday, Augusta has an interesting blend of nationalities. Evidence of this can be found in today's telephone book listings. Likewise, the City's economic hierarchy runs the gamut, from millworkers to the Governor.

Augusta's economic ranks are more weighted toward professionals due to the presence of State government than would be true of a typical town of Augusta's size. While this might be expected to be of benefit to the City economically and in terms of cultural and economic opportunities, the fact is that most of these relatively well-off employees live outside of the City, in neighboring

Manchester, Vassalboro, Hallowell, or other nearby bedroom communities and small towns. Many potential users of and contributors to cultural, educational, and civic institutions of Augusta give their time and contributions in their own communities. This trend appears to be changing somewhat, as the Library, the YMCA, and other institutions have recently completed and/or are contemplating major expansions, relocations and improvements.

Augusta is a city of neighborhoods, and always has been. This fact is made more interesting by the fact that, unlike most Maine communities that are split by a river, Augusta occupies both banks of the Kennebec. The east side-west side stature of neighborhoods makes for contrasts and differences, sometimes resulting in political difficulties, other times causing residents on both sides to unite over efforts to clean up the Kennebec and deal with other common problems. The ethnic breakdown neighborhoods is not as strong as it once was, although Sand Hill continues to thrive on its strong French roots. Most of the others are more multi-cultural.

Many of the neighborhoods take pride in their historic homes and tree-lined streets. Historic preservation efforts are underway to preserve significant historic properties and districts in many areas of the City, to prevent further losses and promote the wonderful resources that remain. Some have had to take stands in the recent past to preserve what they most value, such as the Myrtle/Willow neighborhood on the near east side.

Some neighborhoods are being fragmented, such as the Arsenal Street portion of the Eastern Avenue neighborhood and, to a lesser extent, the Winthrop Street area, because of commercial development. In the case of the former district, the expansion of Maine General Health is driving the conversion of part of that neighborhood to office use; while the changing of large old houses from residential to office use to serve businesses needing to locate near State Government is affecting the Winthrop Street neighborhood. Through the efforts of the Capitol Riverfront Improvement District, attention is once again being focused on the residential potential of close-in neighborhoods and Downtown as desirable places to live based on their proximity to solid employers such as the hospital and the

State, and to the cultural and natural resources that are available in the City.

Other residential neighborhoods, such as Lower Sewall Street and much of the East Side including the Mayfair and Fairview areas, remain strongly residential and exhibit a great deal of pride and confidence in their futures.

# **Transportation**

Transportation issues have been at the forefront of planning efforts in Augusta for many years. The effect of the automobile and its supporting infrastructure on the city has been significant. City growth has placed a heavy burden on an existing urban fabric that was intended for the slower pace of the pedestrian, and horse and buggy. Congestion through the middle of the city – Western Avenue and the traffic circles flanking the ends of the Memorial Bridge being particularly notorious – has steadily increased. Adjoining neighborhoods are feeling the effects as commuters seek less crowded routes to bypass more congested areas, creating additional safety concerns.

Key transportation issues for the City and this master planning process that have been raised during MPC meetings and in City planning documents include:

- Timely implementation of the Third Bridge Study recommendations
- Resolving long term regional and local safety and mobility needs during the Memorial Bridge NEPA Study (assessing rehabilitation or replacement of the bridge and the two rotaries)
- Resolving congestion and safety problems at the Memorial and Cony Circles
- Improving pedestrian safety and facilities through sidewalk, trail, crosswalk, lighting and landscaping improvements
- Implementing travel demand management measures (see below)
- Improving the appearance and function of major roads through landscaping, access management, and traffic signal coordination/improvements
- Reducing through-truck traffic from City streets and arterials
- Improving the appearance, supply and management of parking on the two State campuses, and,

• Mitigating State-related neighborhood cut-through traffic and preserving neighborhood integrity.

# Traffic:

A number of highly visible planning processes are underway or have been recently completed that will significantly affect the future of the City. These include:

- The Augusta Travel Demand Management Study (T.Y. Lin, 1995),
- The Augusta Third Bridge Study (Vollmer Associates, 1993)

Some key findings from these studies, and other Maine Department of Transportation studies concerning traffic safety relating specifically to the master plan area are:

- For the planning period, traffic volume throughout the Augusta area is expected to increase between 25% and 50%, depending on location
- The Third Bridge (Alternative 'B') will significantly reduce forecasted traffic increases in many areas, including the Western Avenue corridor
- Increases in traffic in the West and East campus areas will not be reduced by the Third Bridge
- The highest number of accidents in the state occur at the Cony and Memorial traffic circles
- The only high accident location within the planning area is that portion of Sewall Street between Capitol Street and Western Avenue

#### Existing Traffic Volumes and Congestion

Congestion at intersections and roadways is categorized according to the amount of delay in travel and assigned a Level of Service. Letter grades are used, from A (best) to F (worst). The chart that follows, entitled *Identified Congested Areas*, summarizes locations where traffic congestion occurs (at Level of Service E or F), as identified in previous planning documents (Sources: Traffic impact studies submitted to the City of Augusta in conjunction with development applications; the Augusta Travel Demand Management Study (TYLIN, 1995); the Augusta Third Bridge Study (Vollmer Associates, 1993)).

Current and forecasted levels of traffic on roadways and at intersections need to be considered when planning to relocate dispersed State employees at multiple locations to the West and East Campuses. Congested locations are clustered around the downtown area and the Western Avenue corridor

# Forecasted Traffic Volumes

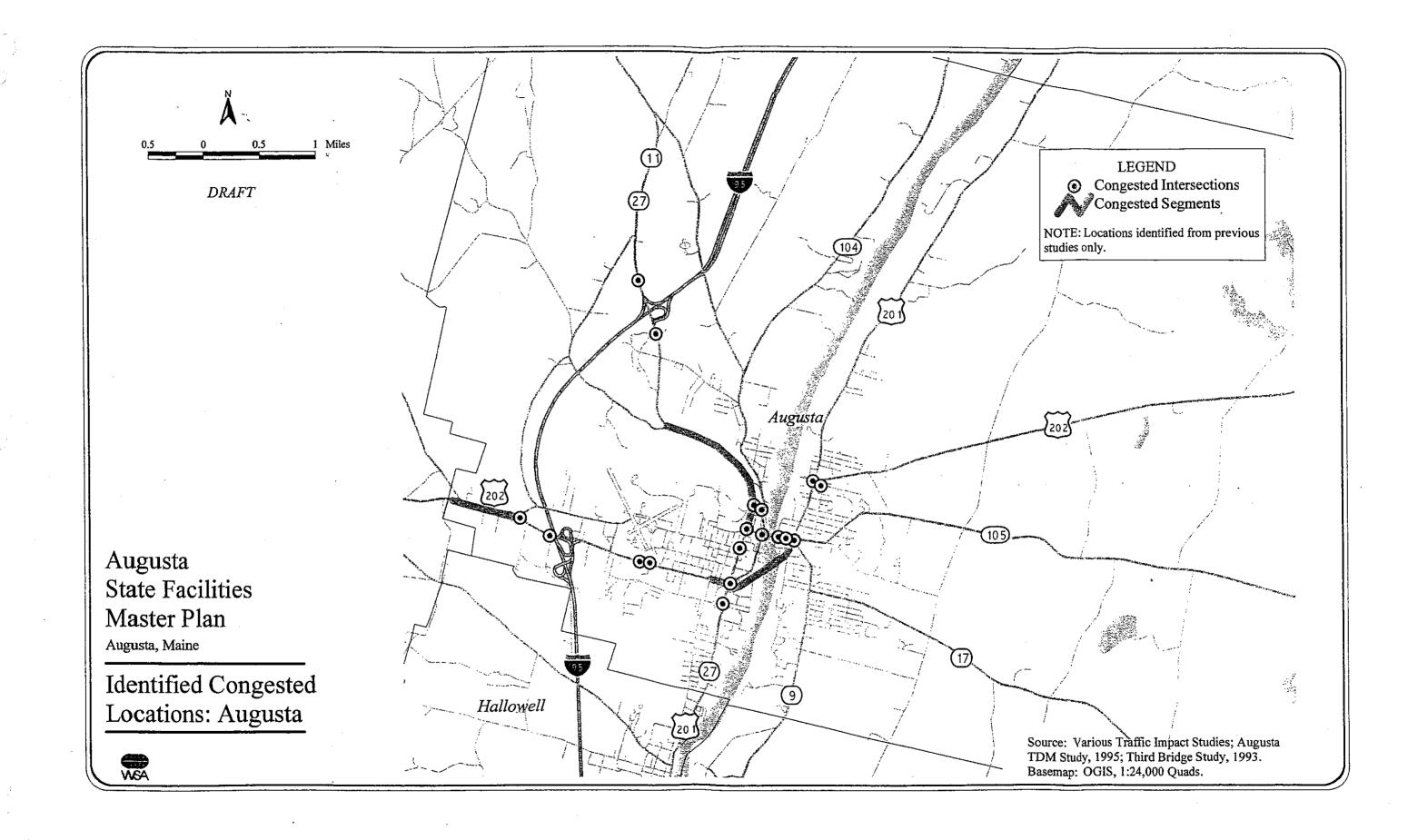
The recently completed Third Bridge Study forecasted daily traffic volumes at key locations throughout the City to evaluate the relative merits of alternative bridge locations and sets of connecting roads. The graphic on the following page, entitled *Future Traffic Forecasts*, summarizes the results of this analysis. It shows existing (1995) volumes, those forecasted for the 'Do Nothing' alternative (2015), for the preferred alternative (2015-Alt. B) and for the preferred alternative with a future connection extending from Route 3 to Route 17 (2015-Alt. to Route 17).

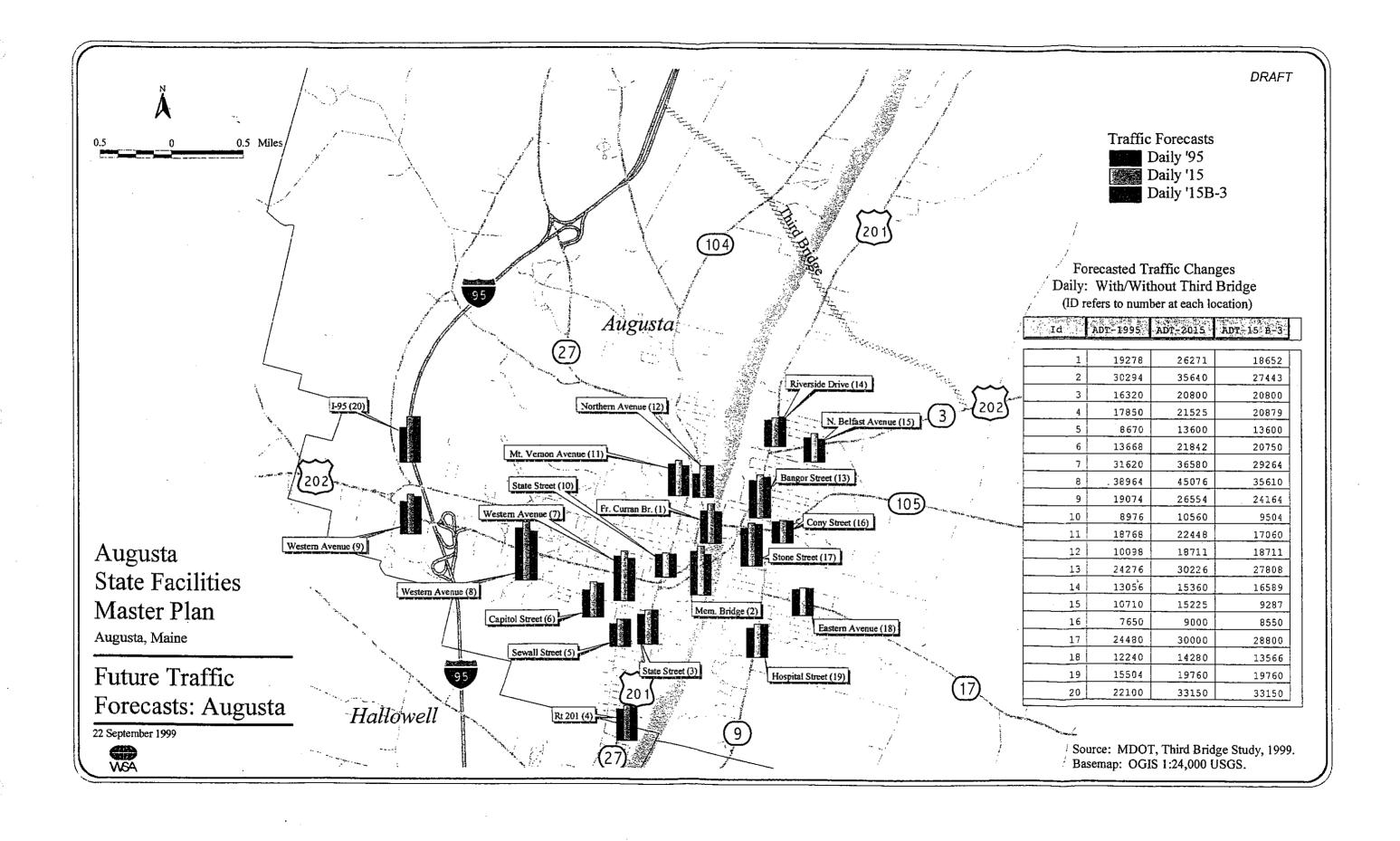
Key findings of the MDOT analysis for this master planning process are that the Third Bridge (Alternative B) is anticipated to:

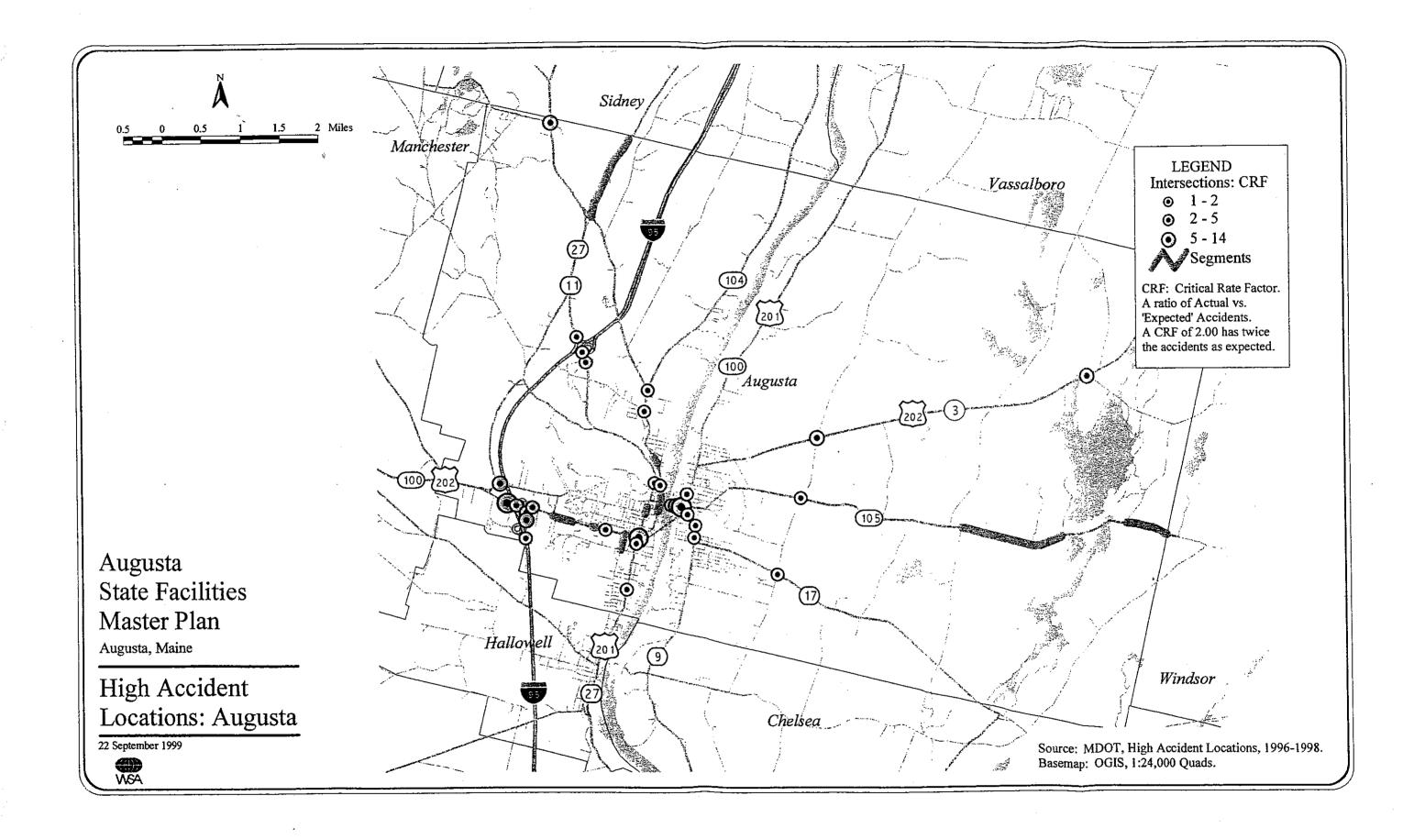
- Significantly reduce forecasted traffic in many locations including the Memorial and Father Curran Bridges, Route 3/N. Belfast Avenue, and the Western Avenue corridor
- Have negligible/no impact on projected increasing traffic volumes on State Street south of Capitol Street (increasing approximately 25% from 1995 to 2015)
- Have negligible impact on projected increasing traffic volumes on Capitol Street west of Sewall Street (increasing approximately 50% from 1995 to 2015);
- Have negligible/no impact on projected increasing traffic volumes on Sewall Street south of Capitol Street (increasing approximately 50% from 1995 to 2015), and,
- Have no impact on projected increasing traffic volumes on Hospital Street near the East Campus (increasing approximately 25% from 1995 to 2015).

#### Traffic Safety

The standard method used to identify locations with potential traffic safety problems is the Maine DOT's accident history statistics, namely the High Accident Locations (HAL). The two components of the HAL determination are the Critical Rate Factor and the number of accidents during the most recent three year period. The CRF is a numerical ratio of the number of Actual Accidents versus the number of 'Expected' Accidents at a similar intersection within the state. For example, a CRF = 2.0 identifies a location with twice the accident experience of







that expected at a similar intersection elsewhere. To be considered a HAL, a location must have a CRF equal to or greater than 1.0 and have had 8 or more accidents in the most recent three year period.

The graphic on the following page, *High Accident Locations*, summarizes the CRF data for Augusta. Similar to the map of congested locations, HAL are primarily clustered around the downtown and the Western Avenue corridor. The Memorial and Cony Circles are the two locations with the highest number of accidents in the state, at over 50 per year and over 130 per year, respectively (Memorial Bridge: Draft Purpose and Need Statement, Maine DOT, June 1999).

Within the two campus study areas, the segment of Sewall Street, from Western Avenue to Capitol Street is the one HAL. It had a CRF of 1.7 for the period 1996 to 1998 (High Accident Locations, MDOT). Within the context of this master plan, the goal would be for the preferred scenario not to make any existing HAL worse and to potentially improve safety through the plan. Detailed traffic studies and engineering work will be required to develop options that will meet the needs of the East and West Campuses and links between them as a result of the implementation of the Master Plan as well as those needs that exist today.

Within the context of this master plan, the goal would be for the preferred scenario not to make any existing HAL worse and to potentially improve safety through the plan.

#### **Pedestrians**

The quality of the pedestrian environment is a critical aspect of how an area functions and is experienced. Two levels of pedestrian circulation are critical: campus connections to the adjoining city and internal campus circulation. Current pedestrian facilities to and within the two campuses can be characterized as fair to poor. While there are generally pedestrian facilities available, their quality is often poor as evidenced by quality of materials used, maintenance, and the level of accommodations provided. These conditions are exacerbated during the winter months by inadequate areas dedicated for snow removal. Sidewalks along high volume roadways lie immediately adjacent to vehicle travel lanes, affording the pedestrian little protection or separation from vehicles. Lack of inviting, safe, and friendly pedestrian access from and within parking areas contributes to the overall parking problem.

# <u>Campus-Neighborhood Connections:</u>

These connections provide access to the campuses from adjacent neighborhoods, to and from stores, restaurants and shopping centers, nearby trail systems and other destinations. High quality connections are important to spur those that live within walking distance to walk to work, as an important part of employee wellness programs and to attract people to local businesses. The City of Augusta has an explicit goal of greatly enhancing the quality of the pedestrian environment of the City.

# Campus-to-Campus Connections

The Committee spent a significant amount of time discussing the issue of movement of State Government employees and customers between the East Campus and the West Campus. It is difficult enough now; when more government employees are concentrated on these two campuses as agencies are consolidated, the time needed to make the river crossing will increase. Augusta citizens simply needing to get from place to place within the city are, of course, directly affected as well.

Many options were considered, including water taxi, bridges of several types (from a typical multi-lane automotive structure to a smaller bridge that would accommodate only pedestrians, bicycles, and an electric shuttle bus), and an aerial tramway. The committee agreed that such detailed transportation planning was beyond the scope of its work, especially considering the concurrent efforts of the Capital Riverfront Improvement District, those planning for the new third bridge, and MDOT's ongoing work on the east and west rotaries. Suffice it so say that the MPC recognized the need to consider connection of east to west as a major component of upcoming transportation planning work.

# Site Circulation:

Connections from parking lots to destinations, between buildings and from street edges to buildings are important for safety and to improve the quality of the campus.

# **Parking**

Parking resources on both campuses are limited, and the demand for vehicle storage is expected to increase. Visitors and clients alike are forced to circle the parking lots, looking for available spaces. During weekdays, the streets surrounding the west campus are filled with the vehicles of State employees, creating crowding and safety issues. The large areas of uninterrupted asphalt parking lots on the campuses create serious environmental effects through runoff and the introduction of non-point pollutants to surrounding waterways. They are hot in the summer and cold and open to strong winds in the winter. In many cases, the asphalt paving is in poor condition, cracked and broken. The visual impact of these "seas of parking" is equally severe. The buildings on Capitol Hill are surrounded by cars. Surface parking on the East Campus threatens existing open space and the pastoral setting.

The configuration, design, maintenance and location of parking facilities have important effects on the quality of a campus environment. Parking should contribute positively to the function of a campus while not detracting from its quality.

Important considerations in planning and design for parking facilities include:

- Parking demand (peak and off-peak, seasonality)
- Characteristics of users (duration and purpose, paying or non-paying)
- Configuration (surface or structure parking, small or large lots, clustered or dispersed)
- Site accessibility
- Signage
- Location
- Management.

# **Guiding Principles for Parking**

The Steering Committee adopted a set of 'Guiding Principles' for use in developing recommended parking solutions. The Committee felt strongly that solutions to the parking problems need to be fully integrated with other transportation and site planning issues.

The developed parking principles are:

- Provide for and recognize the specific needs of different users
- Complement the overall master planning goal of providing better public/customer service by State agencies
- Create a desirable balance between space devoted to surface parking and green space

- Provide parking facilities that are attractive, well-maintained, safe, well lit and well signed
- Address peak parking needs during legislative sessions
- Provide a convenient and comprehensive set of transportation options to reduce parking and travel demand (reduce traffic)
- Facilitate cost-effective implementation, and
- Find parking solutions comprehensive in scope including policies addressing traffic, transit, walking, biking, parking, employee hours, telecommuting of/by State employees and energy.

#### Parking Users Groups

User groups that were identified during this planning process were:

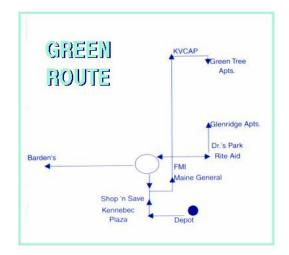
- Visitor and employees with disabilities (handicapped parking)
- State employees all day parking/fixed schedule and shorter-term parking
- Legislators (188)
- Public/Visitor
  - For business transactions and state services (clients)
  - Attending and participating in legislative process
  - Tourists, State House and Cultural Building visitors
  - School Groups
- Service and maintenance crews
- Press, and
- Deliveries short-term drop-off, trucks/vans, service vehicles.

The purpose of identifying recognizable users groups is that specific groups have specific parking needs to which different parking policies and management strategies can be applied. For instance, most State employees that do not need their vehicle for job-related duties during the day may be candidates for off-site parking strategies.

# Transit Services:

# Existing Fixed Route Service

Fixed route transit service in and around the Augusta area is provided by KV Transit, administered by the KV Community Action Program. It provides four routes that use the 'Depot' in downtown Augusta (corner of Water and Winthrop Streets) as its hub. Each route originates there. The diagram at left shows these routes.







# Route Structure

#### Green Route

The Green Route provides service from the Depot to the East Side of Augusta. Service is hourly (except 11:30) with hourly routes running from 8:30AM to 3:30PM (beginning time of service runs). The service day terminates at the Depot at 4:30PM. Its major destinations include:

- Bangor Street
- Shop N Save/Kennebec Plaza
- Maine General Hospital
- Eastern Avenue to KVCAP
- Rite Aid/Doctors Park on Hospital Street.

#### Yellow Route

The Yellow Route provides service from the Depot to the Western Avenue corridor in Augusta. Service is hourly (except 12:30) with hourly routes running from 7:30AM to 4:30PM (beginning time of service runs). The service day terminates at the Depot at approximately 5:15PM. Its major destinations include:

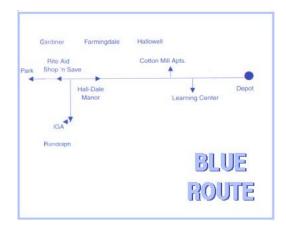
- KMART/Augusta Plaza
- Shaws/Capital Plaza
- Turnpike Mall
- Shop N Save.

These destinations are connected on both the outbound and inbound portions of the run.

# Pink Route

The Pink Route provides service from the Depot to the North Side of Augusta to the Civic Center and Mall Area using a large loop via Northern Avenue (outbound) and Mt. Vernon Avenue (inbound/return trip). Service is hourly (except 12:30) with hourly routes running from 8:30AM to 3:30PM (beginning time of service runs). The service day terminates at the Depot at 4:15PM. Its major destinations include:

- Northern Avenue corridor (outbound)
- Walmart/Mall area
- Maine Job Service/DHS area
- University of Maine, Augusta
- Mt. Vernon Avenue corridor (inbound)
- Winthrop Street.



# Blue Route

The Blue Route provides service from the Depot in Augusta to Hallowell, Farmingdale and Randolph. Limited service is provided with three runs per day starting at 9:30AM, 12:30PM and 4:30PM. The service day terminates at the Depot at 5:15PM. Its major destinations include:

- Hallowell
- Farmingdale
- Gardiner/Rite Aid/Shop N Save
- Randolph/IGA.

Early morning service is also provided using KV Van which departs at 6:45 AM from Gardiner and arrives in downtown Augusta at 7:30 AM. This service is available for use by income eligible riders.

# <u>Assessment of Transit Service for Commuting by State</u> <u>Employees</u>

The current fixed route transit service provides fair to poor service for commuters. This is due to service hours and service frequency. The current late starting times for beginning service (8:30 AM for two of four routes) and early end times for service (3:30 PM for two of four routes and 4:30 PM for the remaining two) do not serve commuters well.

Many workers require transit service that would allow arrival prior to 8:30 AM and service after 3:30 PM or 4:30 PM. Also, frequency higher than hourly is important to spur use by those other than the transit dependent (those with no vehicle available for necessary trips). One route which provides fair service is the Yellow Route which serves the Western Avenue corridor; it begins at 7:30 AM but ends with its 4:30 PM service run. One drawback is that no service feeds this early morning run to increase its potential ridership.

# Travel Demand Management:

GO AUGUSTA is a program of the Maine Department of Transportation (MDOT) intended to increase the use of alternative modes for commuting by public and private sector employees in the greater Augusta area. GO AUGUSTA offers a comprehensive package of travel demand management (TDM) services. The program is

administered by Maine Tomorrow of Hallowell. It began in June 1997.

TDM measures try to reduce the demand for travel during peak traffic periods, generally during morning and afternoon commuting hours (7-9 AM and 4-6 PM). Typical measures include carpooling, vanpooling, transit, improved bicycling and walking, telecommuting and flexible work hours.

GO AUGUSTA offers the following direct commuter services:

- Regional rideshare matching service to increase carpooling
- Coordinated State employee and private industry vanpools
- Lunchtime shuttle service for area employees (trials during the summers of 1997 and 1999), and
- 'Guaranteed Ride Home' using a taxi or rental car.

As of October 1998, GO AUGUSTA had 80 registered carpools, 101 vanpool participants, and 521 registrants in the program. For the 1997 shuttle service trial, 491 riders used the service over the nine week service period, averaging 55 riders per week (Maine Tomorrow). No ridership estimates are available for the 1999 period. The 1999 service used a trolley instead of a van (used in 1997). Shuttle service is a complementary service to traditional TDM measures to allow travel during the lunch hours without the use of a personal automobile.

# Estimated Potential for Effectiveness of TDM in Augusta

As part of the Third Bridge Study, the Maine DOT evaluated the potential effectiveness of two levels of region-wide TDM programs ('moderate' and 'aggressive'). The moderate program is estimated to reduce traffic in the range of 3% to 5%. The more extensive aggressive program would be expected to be 50% more effective, reducing traffic in the range of 5% to 8%. Their analysis showed varying effectiveness depending on the specific location. The West Campus was one location where such a program would be most effective (Capitol Street at Sewall Street), with traffic reductions estimated to be 8% to 14% (Draft Analysis of Transportation Alternatives for the Augusta Area, MDOT, April 1997).

# B. East Campus

# Land Use: Campus and Surrounds

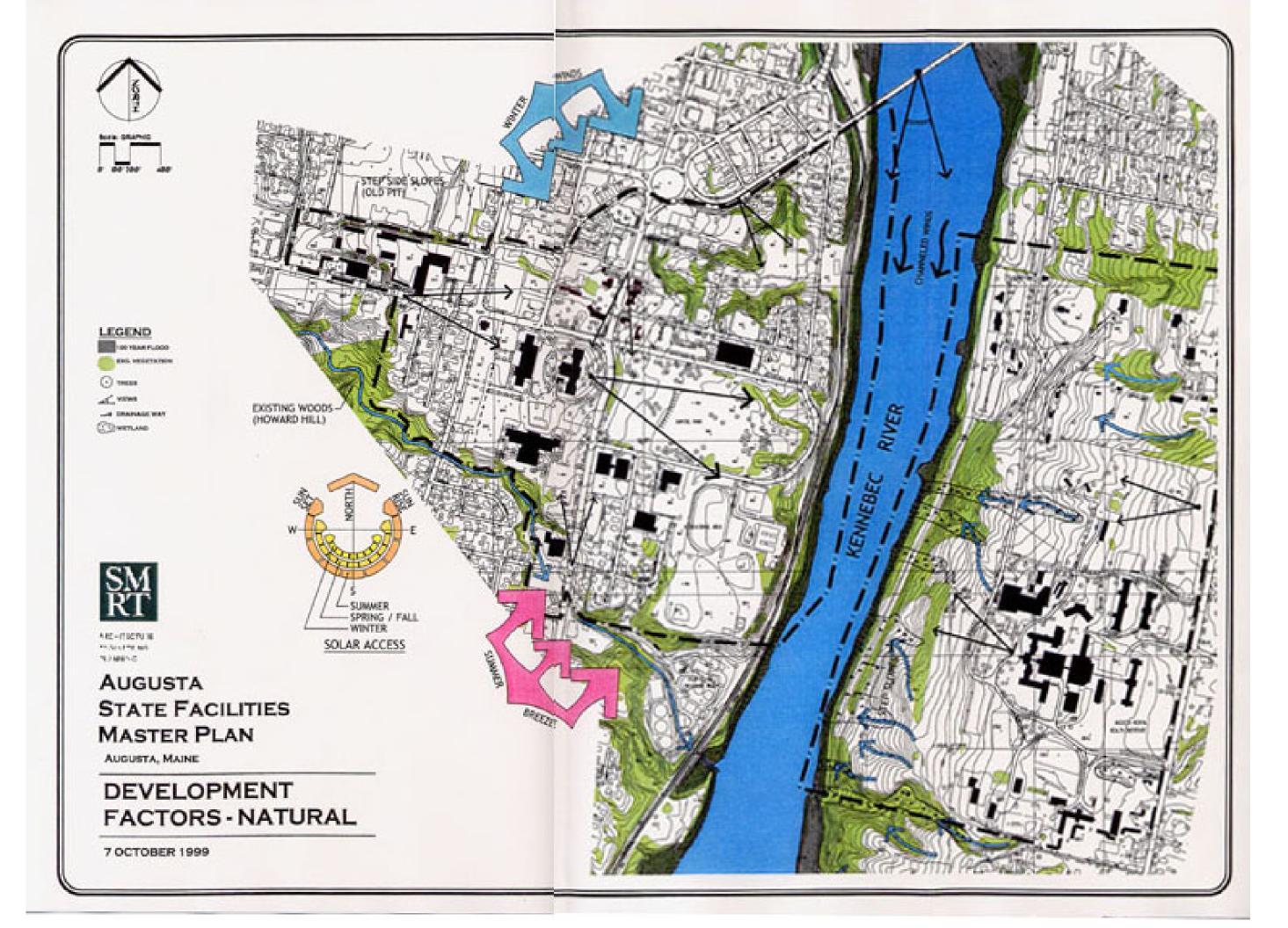
# Existing Development:

The East Campus, with large areas of open space between historic buildings, has a much lower density of development than the surrounding urban areas. It comprises the existing Augusta Mental Health Institute (AMHI) and the Kennebec Arsenal. (Please refer to the Building Location Map – East Campus.) It is flanked by small-scale residential neighborhoods to the north and northeast, open space to the east and southeast, and rural residential development to the south, with the Kennebec River forming western boundary. (Please refer its Development Factors: Land Use Map.) The hospital district to the immediate north of the Arsenal forms a transition zone to the denser urban core

# **Zoning and Regulatory Conditions:**

campuses within the Institutional/ Both lie Business/Professional Subdistrict (BP) of the Capitol-Commerce District. (Please refer to Development Factors: Regulatory) As stated in the Land Use Ordinance, City of Augusta, "The BP District is an area for major health and business government institutions and related professional offices with locations suitable for the growth of each." All proposed development will be an allowable use in the zone. The BP District, in addition to the existing AMHI campus, encompasses the frontage property along Hospital Street (up to and including the Motor Vehicle Building), the Arsenal, and an area along Arsenal Street up to the Memorial Bridge. The northeast portion of the Arsenal abuts a Medium Density Residential District (RB1). This area includes the Eastern Avenue and Mayfair neighborhoods, established residential districts. The much lower density, Rural Residential District (RRES) is located southeast of the Campus. This area includes widely spaced single-family residences and the Pine Tree State Arboretum.

Those portions of the East Campus lying within 250' of the river high-water mark fall within a more restrictive Shoreland Overlay Zone. Other overlay zones concerning resource protection occur in the lower, river-oriented areas. Restrictions to development tied to these zones allow for preservation of open space and views. Currently, only



lower portions of the Arsenal and a pedestrian "greenway" running alongside the river fall within this area. In general, the zone consists of steep, wooded riverbank conditions and, as such, is not suitable for development.

The East Campus is currently permitted under Maine's Site Location of Development Law and Natural Resources Protection Act (Tier 1 wetland impact). All new development will require review by the Department of Environmental Protection. Further review may be required by the Maine Department of Transportation if proposed traffic volumes warrant. State review under the Natural Resources Protection Act (NRPA), and federal review by the U.S. Army Corps of Engineers will be required for any wetland impact.

# Circulation: Pedestrian/vehicular Traffic, Roads, Parking

#### Traffic:

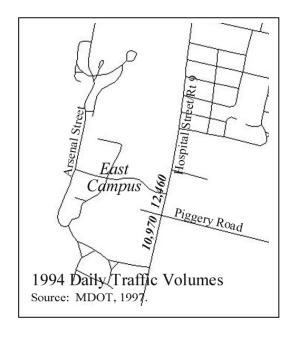
Primary access to the East Campus is provided by Hospital Street/Route 9 with secondary access provided by Arsenal Street. Available area daily traffic volumes for Hospital Street are shown to the left.

As described previously, traffic volumes on Hospital Street north of Eastern Avenue are forecasted to increase by approximately 25% during the period 1995 to 2015. Similar increases are likely to occur near the East Campus. Traffic on Arsenal Street can be anticipated to increase as expansion of Maine General proceeds, as redevelopment of the Arsenal property occurs and when traffic signal and roadway improvements at the Cony Road/Arsenal Street intersection are made.

# Pedestrian Circulation:

Mohr and Seredin Landscape Architects prepared a detailed Site Circulation Plan during the Fall/Winter1998/1999. Key findings of their analysis showed that:

- Pedestrian walkways are too narrow and had poor drainage causing icing in winter and puddling during other periods;
- Parking lots are poorly connected to buildings, some requiring pedestrians to walk in internal roadways due to lack of sidewalks;
- Parking lots and walkways are poorly lit;
- Protection from wind and other elements is lacking; and,

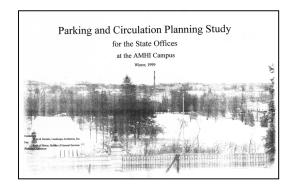


 Crossing of Hospital Street (opposite Ray Building) is dangerous (Parking and Circulation Planning Study for the State Offices at the AMHI Campus, Winter 1999).

Additional observations about pedestrian accommodations at the East Campus are:

- Connections to the existing Kennebec River pathway are weak;
- Sidewalk along Hospital Street is exposed to traffic (sidewalk located directly at the curb), making it an unpleasant place to walk;
- Connections to the Arboretum are weak; and,
- Sidewalk along Arsenal Street is too narrow, exposed to street traffic, and in disrepair.

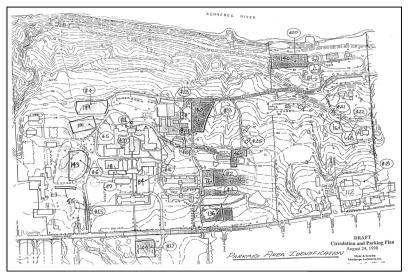
Construction projects underway during the course of this planning process will address many of the most important deficiencies, most notably pedestrian connections from parking areas to buildings. These will be dramatically improved by current projects.



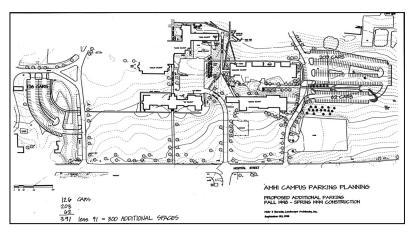
# Parking:

The 1999 Mohr and Seredin Parking and Circulation Planning Study inventoried 1369 parking spaces. Recent construction projects have reconfigured several parking areas and are creating new parking lots.

The current State employee population of the AMHI Campus is approximately 970 (SMRT).



Existing parking on AMHI Campus (August, 1998).



Proposed AMHI Campus parking (1999).

# Environment: Landscape Character, Natural Features, Views

# Landscape Character

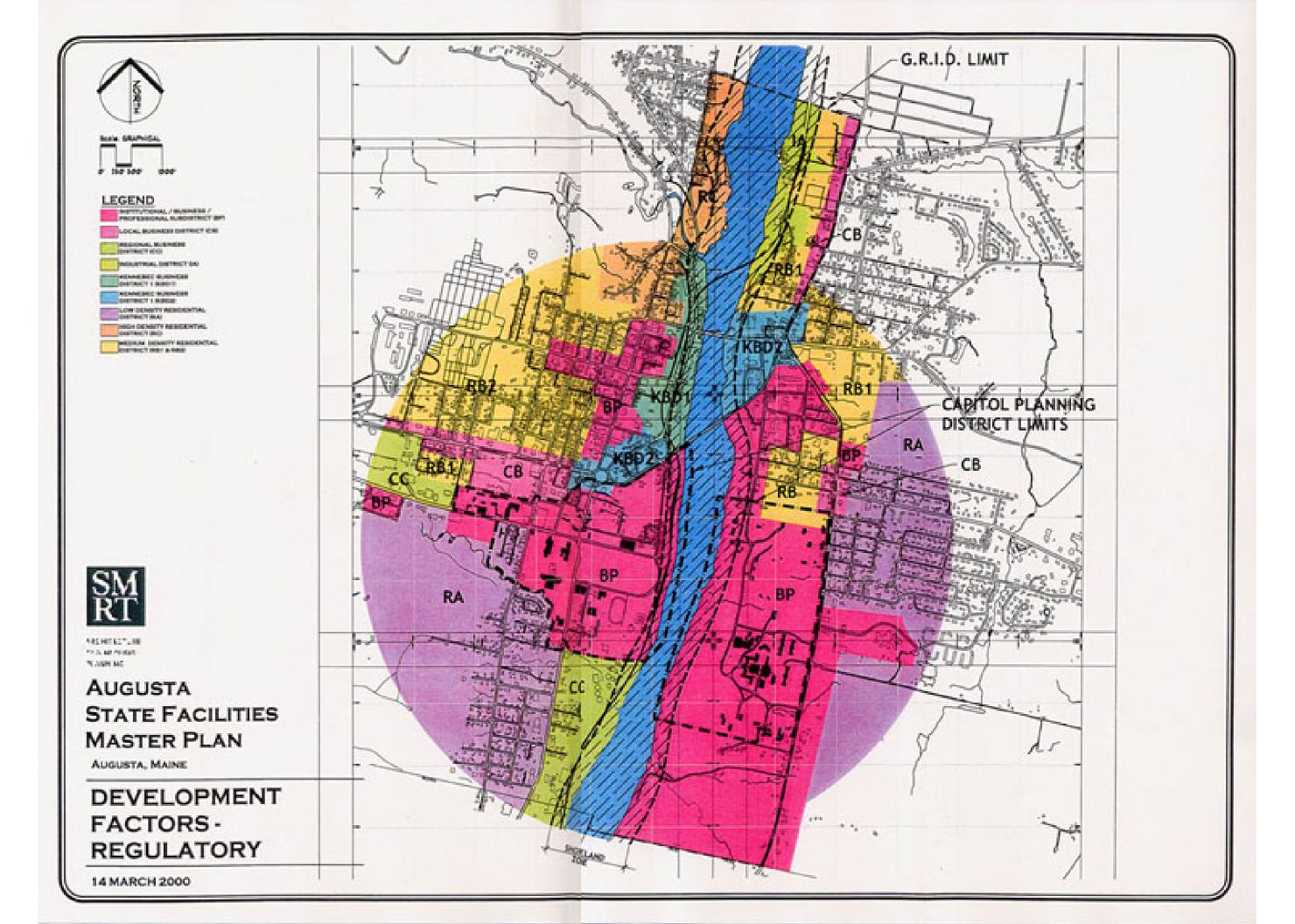
The East Campus is situated on the east bank of the Kennebec River and spans the area between the river edge and Hospital Street, which runs north-south along the valley rim. The steep sides of the river valley create challenging conditions for development. In time of flood, the cross sectional geometry of the valley can lead to rapid rises in water elevation and flow rates. Modern development in the flood zone is designed to be more passive in nature, and expendable, because of the potential for flood related damage. The river itself, one of the largest in the state, is still tidal at this point.

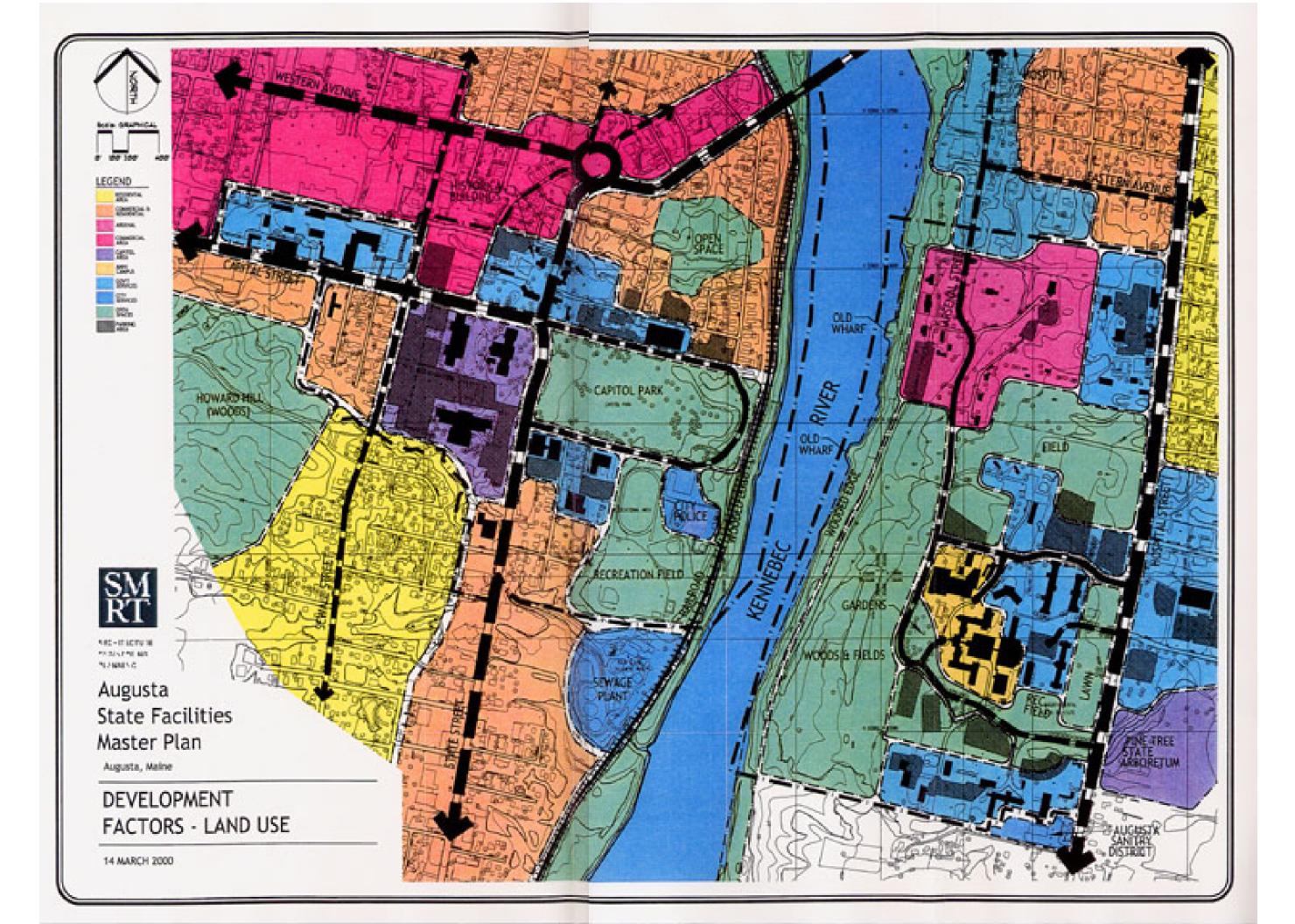
The upper portions of the campus are flatter, with slopes in the 8% to 10% range. The existing AMHI development took advantage of this in the southeastern area of the site. The northern portion of the campus, and western portion below Hospital Avenue drop off quickly to the river edge with slopes exceeding 20%. The Kennebec Arsenal is located in a flatter, river terrace area at the northwest corner of the campus.

#### Natural Features

Winds:

The East Campus with a primarily westward facing slope orientation is exposed to both winter and summer winds. Winter conditions can be harsh; thus the use of vegetative or architectural screening and buffering is recommended. (*Please refer to Development Factors – Natural Map*)





# Solar Orientation:

Though the predominant slopes on the campus face due west, the open surroundings of the East Campus enable reasonable opportunities for solar gain.

#### Wetlands:

Wetlands occur primarily in lower drainage ways on the East Campus. As these are within the Shoreland Zone and in prime open space, they will not be a factor in siting of new development. Small pockets of wetlands exist at the south end of campus, adjacent to the Campbell Barn, and above Hospital Avenue, in the center of campus. Some impact to these areas may be expected. There are no wetlands on the site that are mapped and included in the state inventory.

#### Flood Plain:

The 100 year flood plain occupies a very narrow band along the Kennebec River edge.

# Vegetation:

Existing vegetation occurs in masses located primarily along the river corridor or as individual specimens along streets or in landscape locations. Specimen and shade tree planting is relatively sparse on the East Campus, with some remnants of earlier efforts still remaining.

#### Soils:

Soils information for the area was obtained from the medium intensity study "Soil Survey of Kennebec County Maine" (USDS Soil Conservation Service, August 1978). In general, the area lies within the Buxton-Scio-Scantic soils association. The upper portion of the campus, upon which the largest part of the existing AMHI lies, is made up of Scio very fine sandy loam, 3% - 8% slopes (SkB designation). This soil type is characterized as being deep and moderately well drained, with potentially high ground water and high potential frost action. The middle portion of the campus, a band from the west face of the Stone Building to a point below Hospital Avenue and extending north through the middle of the Arsenal site, is made up of Hartland very fine sandy loam, 8% - 15% slopes (HfC designation). This soil type is characterized as being deep and well drained, with high potential frost action.

Historically, ledge has been encountered in construction.

#### Views:

Significant panoramic views exist from points on both sides of the Kennebec River where elevation and breaks between structures and vegetation guide the viewer's eye. Historic buildings and mature plantings frame views from Hospital Street and the East Campus looking west towards the Capitol. Of particular note is the view corridor formed between the Arsenal and AMHI. On axis with Capitol Park directly across the river, the view here is best from a Hospital Street vantage point and provides a fine look at the State House framed by the Olmstead landscape.

The visual character of the east campus can be characterized as having a non-urban, semi-rural and pastoral quality. A shift in visual character occurs at the Memorial Bridge from distinctly urban to the north, to a pastoral/rural character to the south.

Shorter-range viewpoints occur north and south of the Capitol along State Street. Long views to the Capitol occur at the west end of Capitol Street soon after it turns off Western Avenue. Long views to the East Campus exist from the Capitol through Capitol Park, and from Memorial Bridge.

# Infrastructure: Utilities

#### Water Service:

Water service is supplied to the East Campus by the Augusta Water District system. 10-inch mains are located in Hospital Street and Hospital Avenue. A six-inch meter at Hospital Avenue supplies the majority of the campus. A second six-inch meter off the Hospital Street main supplies fire protection and a few buildings. Water volume and pressure are adequate for proposed development activity, though consideration should be given to closing the "loop" between Hospital Street and Hospital Avenue to improve area pressures and flows.

On-campus water supply lines are aging and generally in need of upgrade and replacement. New development and renovation will require, at a minimum, new fire suppression supply lines, and in most instances, new domestic supply also.

# Sanitary and Stormwater Sewer Service:

Historically, both sanitary sewerage and stormwater drainage were collected in a single piped system and discharged directly into the Kennebec River. With the advent of more modern treatment practices, these flows have been collected and conveyed to a sewage treatment plant. Sanitary sewer service is supplied to the East Campus by the Augusta Sanitary District. The original campus system combined sanitary and stormwater flows. In recent years, portions of the system have been upgraded, separating the flows as required by the Maine Department of Environmental Protection Combined Sewer Overflow (CSO) removals program. This federally initiated mandate stipulates that for every new gallon of wastewater introduced into a treatment system, an agreed upon multiple of gallons of stormwater must be removed from the system. To achieve this, municipalities must install individual separate sanitary and storm sewer lines. The stormwater flows must be handled in a way that will not cause erosion or increase the potential for downstream flooding. Currently, study is underway on the East Campus concerning storm water and sanitary sewer separation. A major (42") interceptor is located at the base of the East Campus and runs along the river, south to the treatment plant.

New development will require management and control of the quantity of new stormwater flows. The East Campus does not lie within the watershed of a great pond, water body most at risk, or a threatened area of a watershed, as defined in the Maine Stormwater Management Law; therefore greater than customary storm treatment is not required. Control of stormwater quality will need to be consistent with the Stormwater Law for removal of Total Suspended Solids (TSS). New construction must meet the standards of the Maine Erosion and Sedimentation Control Handbook for Construction: Best Management Practices (Cumberland County Soil and Water Conservation District and Maine Department of Environmental Protection, Latest Edition).

# HVAC, Power and Communications:

As part of the AMHI Master Plan work of 1997, SMRT engineers conducted a preliminary evaluation of the mechanical and electrical systems on the AMHI Campus. The evaluations were done on a purely visual basis; and in many cases the engineers were unable to get into

mechanical rooms or electrical closets and vaults. Therefore their reports are not exhaustive and in some cases are general due to the lack of critical information. However, they do represent a valuable "snapshot" of conditions in most of the buildings and campus-wide at that time. The buildings and grounds of the Kennebec Arsenal were not included in this evaluation. Conditions at individual buildings are summarized under Buildings later in this section.

# **Electrical Systems**

# **Distribution System**

The campus is currently fed from a 2500 KVA transformer in the CMP Cony Substation and is distributed around the campus at 4160 V. The campus can also be fed from one of two other CMP sources in the event of a failure at the Cony Substation. One of these circuits (Farm Circuit) remains energized but an open cutout prevents power from being supplied to the Deering Vault. The cable is fed underground from the street to the Deering vault. Although the system operates at 4160 v many of the underground cables have been upgraded to 15 KV #2/0 AWG cable but some 5 KV #2 AWG cable still exists. The peak demand for the entire campus for the fiscal year 1996 has been a maximum of 1154 KVA.

Two 250 KW diesel powered generators installed in the mid 1950's are located in the electrical room near the Deering building. The diesel fuel for the two generators is stored in two 275 gallon storage tanks. These generators do not meet the requirements of an emergency electrical system because loads must be manually shed so the generators can be brought on line. When shedding loads, maintenance workers first shed none-essential loads (office space) and leave the loads that have the highest priority at the time to be run by the two generators.

The distribution system is adequate for existing loads with some spare capacity, but not sufficient capacity to add the air conditioning equipment recommended to the entire campus. Many of the existing oil type transformers in the high voltage vaults are at or above their capacity.

The two existing generators are able to pick up only half of the demand of the total campus thus loads must be manually shed before the generators are brought on line. NFPA requires that hospitals have an emergency electrical system to provide power during normal power disruption. The existing generator set is in violation because it needs to be manually started when the normal supply of power is cut of.

NOTE: Many deficiencies in the electrical system exist throughout the facility but are too numerous to individually identify in this report. Current deficiencies include but not limited to uncovered enclosures with energized wire, inadequate clearances in front and above electrical equipment, improperly labeled equipment and panelboards.

# Fire Alarm and Emergency Lighting Systems

Each building on the campus (unless noted otherwise in this section) has some fire alarm pull stations and audio visual devices. A common theme in nearly all buildings is pull stations and audio/visual notification at each of the building exits. Most buildings also have some battery powered emergency lighting units in corridors and stairwells.

In all buildings (unless otherwise noted in this section) buildings have fluorescent lighting that is in fair condition, but the surface mounted fixtures do not provide proper IES recommenced lighting levels for office areas. Task lighting is used at nearly all workstations to supplement existing lighting. There are an insufficient number of fire alarm devices and emergency lighting devices to meet current NFPA code requirements. Mounting heights of devices do not meet the current ADA requirements for handicap accessibility.

# **Mechanical Systems**

#### Central Boiler Plant and Distribution System

The central steam plant has three Cleaver Brooks Model CB, fire tube boilers: two 700 HP boilers, one installed in 1973 and one installed in 1975, and one 200 HP boiler installed in 1956. All three boiler are fired with No. 6 oil. Two 40,000 gallon oil storage tanks were installed in 1954 in a room formally used for coal storage. An older, third storage tank remains abandoned in this room.

The system operates with 100 lb. steam in the winter and 60 lb. steam in the summer. The boilers are sequenced

according to load, with no more than two running at a time. Only the 200 HP boiler is needed in the summer.

An abandoned Babcock and Wilcox boiler, installed in 1956, remains in place because it contains significant amounts of asbestos and would be costly to remove.

Steam is distributed at high pressure and reduced to low pressure at individual buildings. The central plant serves the following buildings: Stone North, Stone South, Administration, Central, Pavilion, Tyson, Elkins, Harlow, Ray, Marquardt, Deering, Greenlaw, Activities/Gym, CETA Building, Old Maximum Security Building, Burleigh Pavilion, South Burleigh, North Burleigh, Burleigh Annex, the Steward House, the Carpentry Shop, and Warehouse. Most of the steam piping serving buildings in the central part of the campus is located in walk though tunnels. Piping to remotely located buildings - Burleigh complex, Old Maximum Security, Nurses' Home - is direct buried.

The boiler plant is well maintained, with equipment regularly serviced. Good maintenance along with sequencing of boiler operation with fluctuations in load should lead to prolonged boiler life for all three boilers. Although a more in depth inspection is required to accurately determine the condition of the boilers, it appears that the two 700 HP boilers should have quite a few more years of serviceable life. The 200 HP boiler is 41 years old and will have to be replaced sooner. However, there are presently no known concerns that would require its immediate replacement.

Ground water currently seeps through the walls of the oil tank storage room. An interior perimeter trench and a centrally located sump pump are in place to direct this water to the storm drains. This violates the requirement for secondary containment for oil spill control.

More in depth evaluation would be required to determine the condition of the steam distribution mains and condensate return piping. Much this piping serving the central campus buildings is located in accessible tunnels and basement areas, making repairs easier and less expensive than for the buried mains serving the remotely located buildings such as the Burleigh complex, Old Max, and Nurses' building.

# **Buildings**

# Structural Evaluation

As part of the AMHI planning project of 1997, SMRT structural engineers visited the major AMHI buildings to conduct visual inspections to ascertain current structural conditions. No destructive testing was done, and the engineers could not get into some attic and basement areas. Thus these evaluations must be viewed as cursory. However, the following report represents a useful overview of structural conditions as of 1997.

31 buildings were visited over several days. A general walk through and assessment was made for each building. Where existing structure was accessible, the type and condition of the structural system was noted. No demolition was performed to identify structural elements. It should be pointed out that a complete structural evaluation, including code review, was beyond the scope of this project.

The infiltration of water into the below grade spaces was common to almost all the buildings and tunnels. To control storm water and its negative effect on the buildings, the installation of foundation drains around the perimeter of all buildings, water proofing at the foundation walls and general site grading is be required can be expected.

All of the buildings have an exterior masonry veneer of either brick or granite. It many cases, the age of the structure will require that some of the mortar will need to be repaired. In the case of brick veneers, construction of this period generally did not account for water infiltration which is inevitable with this type of system. Given that there is likely no vapor barrier or drainage cavity in the wall, an exterior applied coating to prevent water from penetrating the brick surface is the recommended solution. The effects of water/moisture infiltration is evident throughout the buildings in the form of weakened plaster, flaking paint and rotted wood framing.

#### Mechanical Evaluation

Many of the HVAC systems and equipment installed in the individual buildings have long exceeded their estimated service lives. These systems were installed when most

design standards were quite different from what they are today, especially concerning energy, ventilation, and comfort. The use and occupancy of most of the buildings has changed drastically over the years creating very different system performance requirements. Listed below are some of the problems found to be common to many of the buildings:

- During walk-through evaluations, occupants were randomly selected in each of the buildings currently used for offices and asked for general comments on the building. Of all the issues raised, the two most frequent and the most emphasized responses concerned poor temperature control and poor indoor air quality.
- Much of the ductwork and ventilation shafts have been in use many years. The supply risers and diffusers were often observed to be quite dirty.
- Some of the buildings have no outdoor ventilation, others have inadequate or poorly distributed ventilation.
- Because of age, deterioration, and poor controls, most of the systems are not energy efficient.
- Existing heating and ventilating systems were evaluated with respect to conversion to provide air conditioning. None of the systems were found to be appropriate for this type of modification. The air handlers do not have space or fan capacity to accommodate cooling coils. The equipment and air distribution systems are not properly sized for the increased air flow necessary for air conditioning and are not insulated to prevent exterior condensation. In a number of the buildings, air is ducted through the original masonry chases, which are too small and inaccessible to modify for air conditioning. The age and general condition of most systems is perhaps the strongest argument for total replacement over reuse.
- Poor systems and poor controls require frequent responses from facilities personnel, who are often limited in options available to correct problems.
   Occupants are left without the ability to do anything about uncomfortable conditions.



- 1. CENTRAL BUILDING
- 2. TYSON BUILDING
- 3. ADMINISTRATION BUILDING
- 4. STONE NORTH
- 5. STONE SOUTH
- 6. AMHI GYMNASIUM
- 7. WILLIAMS PAVILION
- 8. HARLOW BUILDING
- 9. RAY BUILDING
- 10. WAREHOUSE
- 11. ENGINEERING BUILDING
- 12. GREENLAW BUILDING
- 13. LAUNDRY
- 14. MARQUARDT BUILDING
- 15. DEERING BUILDING
- 16. SURPLUS PROPERTY
- 17. MACHINE STORAGE BLDG.
- 18. CENTRAL WAREHOUSE
- 19. CAMPBELL STORAGE BARN
- 20. FARM HOUSE
- 21. NORTON HOUSE
- 22. CETA BUILDING
- 23. DOCTOR'S HOUSES

- 24. STATE POLICE GARAGE
- 25. MEDICAL EXAM / MORGUE
- 26. OLD MAX
- 27. COMMANDANT HOUSE (OLD TREASURER'S BLDG.)
- 28. GATE HOUSE
- 29. LOCKE HOUSE
- 30. NORTH BURLEIGH
- 31. BURLEIGH PAVILION
- 32. SOUTH BURLEIGH
- 33. BURLEIGH ANNEX
- 34. BURLEIGH ANNEX GARAGE
- 35. COBURN PARK TOILET
- 36. LARGE POWDER MAGAZINE
- **37. PUBLIC SAFETY BUILDING**
- 38. CRIME LAB
- 39. ENTOMOLOGY LAB
- 40. ARSENAL
- 41. BUREAU OF MOTOR VEHICLES
- 42. CARPENTRY SHOP
- 43. PAINT SHOP
- 44. GREENHOUSE



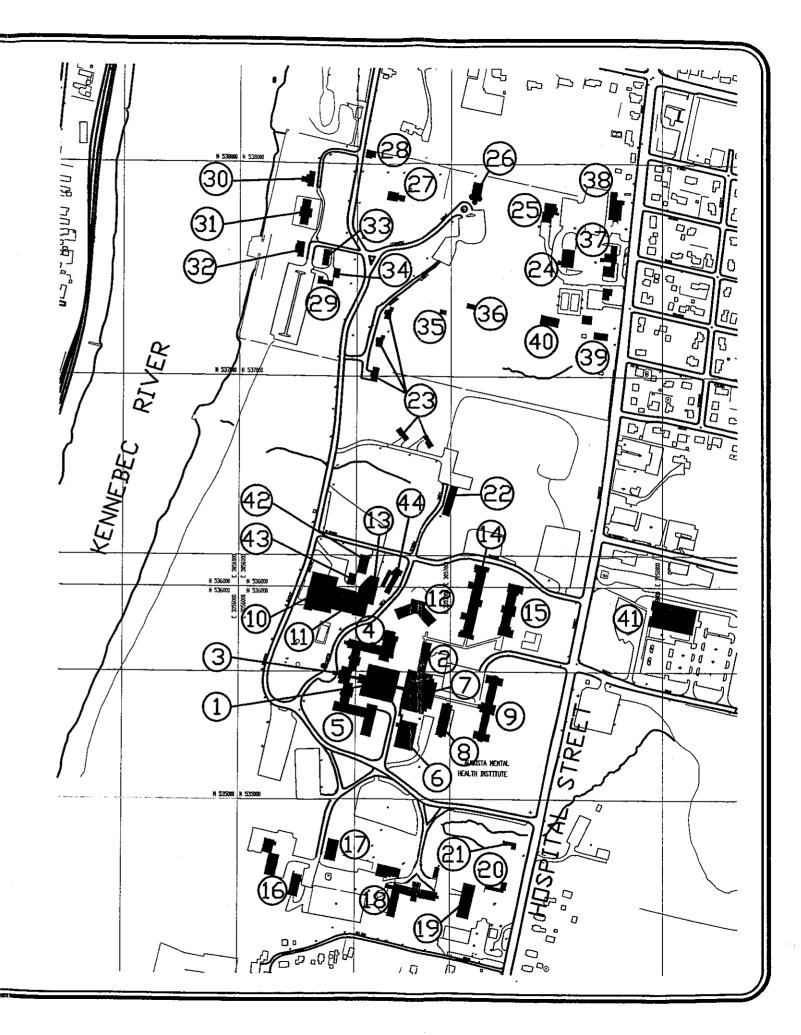
ARCHITECTUR ENGINEERING PLANNING

# AUGUSTA STATE FACILITIES MASTER PLAN

**AUGUSTA, MAINE** 

BUILDING LOCATION
MAP CAMPUS EAST

14 MARCH 2000



## Architectural Evaluations:

# Administration Building

Location: AMHI Central Campus

Inventory number: AUG061 Gross area: 26,550 sf

Primary occupant/use:MHMR&SA/AMHI

The Administration Building, part of the Stone Building Complex, houses AMHI administrative offices. It has been the "front door" of AMHI since its construction in 1839. and is one of the most important of the AMHI buildings. Designed by architect and builder John D. Lord of Hallowell, it was, before expansion, a simple Greek Revival symmetrical building consisting of a four-story central block flanked by a three-story wing to either side. Using today's nomenclature, the Administration Building is actually only the center portion of the original Maine Insane Asylum building. The two flanking wings are now considered parts of Stone North and Stone South (see descriptions below). A two-story portico dignified the main entrance. There were 200 rooms in the completed building, to house 120 patients. The buildings were constructed with massive Hallowell granite block exterior walls, backed up by a separate brick wall. partitions were brick, with floors of southern yellow pine. There is little remaining evidence of the original interior, which has been subject to many renovations almost from the beginning of the building's life. Major wings were added starting in 1846, resulting in internal changes to the original building as well as new construction. A severe fire that gutted the southern half of the building in 1850 led to another round of renovations.

The exterior is little changed from the original with two major exceptions. The first change was the addition of a granite porte cochere to the front portico, designed by George M. Coombs as part of an extensive modernization of the entire Stone complex in 1892. The second is an elevator penthouse that extends above the original roof on the facade (west elevation), dating from 1956.

Even though there is little trace of the original interior of the Administration Building, there are still some remarkable interior features dating from the most extensive renovation of the building that began in 1892 and continued until 1897. A fine oak staircase constructed in 1893 connects the four floors and attic level with tall paneled wainscot, newel posts and banisters, and includes a second floor window seat. Many rooms that were remodeled at this time, including first floor waiting rooms, second story administrative offices, the third floor Superintendent's Office, and fourth floor lodging rooms, contain elaborate wainscot and paneling, parquet floors, marble fireplace surrounds, mirrors, coffered ceilings with oak beams, and polychromatic embossed decorations on the upper walls. There are two second floor rooms and several fourth floor rooms that are notable for retaining Greek Revival interior details from 1851-52 post-fire renovations.

The Administration Building portion of the Stone Complex is in good condition and is remarkable for having retained so much interior and exterior detail in the face of 160 years of dramatic changes at the institution. Its commanding presence on the hillside above the river, its visibility from the Capitol Complex, its condition and quality of construction, and its historic and architectural significance lend credence to the concept of adapting the Administration Building and the rest of the Stone Complex for another century of usefulness.

# Structural (includes Stone North and South Buildings)

The gable roof framing consisted of 3 "x5 1/4" wood joists spaced at 19 inches on center. The joists supported a 7/8" thick tongue and groove wood deck. The joists were supported on 5 1/2"x10" wood beams spanning between timber frames. In some areas, the joists had been cut or removed. Many of the connections between the columns and beams had separated. Some of the columns were shimmed with brick at the bottom. Some areas of the roof deck showed signs of past water intrusion.

The center area of the building was being reinforced at the time of the inspection in anticipation of a reroofing project. No further inspection of this area was performed.

The floor framing consisted of a series of steel beam supporting a flat arch terra cotta brick floor topped with 2 to 4 inches of concrete. The floor system was supported by interior and exterior brick bearing walls. In most areas, the floor and walls were concealed with finishes. The building currently houses the mental health facility and appears to be adequately supporting this use.

In discussions with maintenance staff and construction personnel, the condition of the floor and brick vary from area to area based on the date of construction and the quality of the workmanship. A contingency should be set aside as part of future construction costs in anticipation of hidden defects.

## **Electrical**

The building has a 200 A main distribution panel fed from a two-pole 200 A breaker in a 600 A distribution panel in the Central Building electrical room. The main distribution panel is fed from a 100 KVA, 120/240 V, single phase transformer in the Central Building vault. The 200 A main distribution panel in the Administration Building feeds lighting and receptacle panelboards located on each floor of the building. The building is currently used as support space for AMHI.

The distribution panel has sufficient capacity for the current building loads, but if air conditioning or other mechanical equipment is added the panel will not have the capacity to handle the load. The panelboards for lighting and receptacles are old but appear to be in fair condition.

#### Mechanical

The building is heated by steam fed cast iron radiation. There is no fresh air ventilation except for two fan units installed in 1960 to supply untempered outside air to four interior offices on the second floor. Window air conditioners are used in some rooms.

This building has inadequate outdoor air ventilation and areas of poor temperature control.

# Campbell Barn

Location: AMHI Campus/Hospital Street

Inventory number: AUG030 Gross area: 22,500 sf

Primary occupant/use:BGS - DAFS/storage

When the Hoyt farmhouse (see AUG073) was purchased, the existing farm barn was moved in order to accommodate a new, larger, barn. In the history of AMHI, there were numerous farm structures that were built, remodeled, moved and demolished. A major effort to enlarge and improve the agricultural component of the hospital began in the 1890's. A hay barn and a cow barn were built in 1895,

followed by a piggery and a silo in 1896, all designed by Coombs & Gibbs. The construction of the Campbell Barn in 1903 culminated the major improvements to the institution's agricultural plant. Only the Campbell Barn survives as a reminder of the important role played by agriculture in the history of the institution.

Variously known as the Campbell Dairy Barn and the Campbell Horse Barn, the barn has not been significantly altered since its construction. Also designed by Coombs & Gibbs, it represents a very traditional design for agriculture, and, except for its large size, could be mistaken for a mid-19th century structure.

This magnificent farm barn, now used for surplus property storage, occupies a key site at the south entrance to the AMHI campus. Because of its strategic location, its excellent condition and its architectural and historical significance, BGS commissioned a study of the building for conversion to use as a conference/special events center in 1997. The project report has a much more detailed architectural and historical description of the building.

# Carpentry Shop

Location: AMHI Central Campus

Inventory number: AUG080 Gross area: 9,600 sf

Primary occupant/use:MHMR&SA/AMHI Maintenance

In 1906, the AMHI carpentry shop, housed in the converted original 1861 boiler house, burned to the ground. In 1907, a replacement structure, designed by Coombs & Gibbs, was constructed on the same site. The existing building is a handsome brick two-story building with Colonial Revival detailing to match the nearby Paint Shop. The first floor consists of shop and office spaces, while the second floor and full basement are used for storage. The building is in fair to good condition. Many of the original window and door openings have been altered, but the building could easily be returned to its original appearance.

## Structural

The carpentry shop is constructed of exterior brick bearing walls with an interior framing system of wood columns, beams and joists. The attic space is used I for the storage of raw lumber while the basement and I st floor contain wood

working machinery. The hip roof framing consists of 2"x 7 3/4" wood joists spaced at 24 inches on center. The joists are supported at the perimeter of the building by a brick bearing wall. Near the third points, two rows of 8" square wood beams and 5 1/2"x8" wood column support the joist. 2"x6" tie joists connect the rafters just above the beam. The roof deck consisted of tongue and groove boards.

The attic floor framing consisted of wood joist at 22 inches on center supporting a wood plank floor. The joist were supported by two rows of beams and column similar to the roof framing. The first floor was framed with 3 3/4"x13 and 3"x12" wood joists at 20 inches on center supported by beams consisting of 3-4"x14". The beams were supported by 12"x24" brick columns. The columns appeared to be in fair condition. At least two columns will require repointing and new bricks near the base. The exterior brick bearing wall was in poor to fair condition with one side showing signs of scaling in the mortar. Parts of the exposed granite foundation will need to be repointed The concrete floor slab appeared to be in good condition.

In general the framing appeared to be in good condition. There were signs of water damage in a few areas, particularly in one area of the attic. The brick appeared to be weathered and in some areas would likely need to be repointed

## Electrical

The carpentry shop is fed from 3-10 KVA pole mounted transformers to a 100 A residential load center. The load center feeds lighting receptacles and power tools in the shop. There is a fire alarm notification device in the shop but no pull station at the exit.

# Central Building

Location: AMHI Central Campus

Inventory number: AUG062 Gross area: 69,000 sf

Primary occupant/use:MHMR&SA/offices and support

space

The Central Building, originally a smaller, architecturallysignificant Victorian structure, has been expanded several times via modern one-story additions to serve as the main food service venue for the mental health facility as well as housing other service functions and amenities. Named Coburn Hall soon after its construction in 1876, it was designed by Francis Fassett, the building contained a chapel/amusement hall, a central kitchen and bakery, and dormitory rooms for the staff at the attic level. The Central Building was built of brick with granite trim, and was originally physically connected to the Administration Building via brick corridors, one at the basement and one at the 2nd floor. Later on, it was tied to other AMHI buildings via enclosed overhead corridors and underground tunnels. This building was the first to depart from the severe neo-classical, monolithic granite style of the original hospital, instead representing the High Victorian Gothic style for which Fassett was well known.

The building was expanded in 1887 to the east and west along its axis in order to enlarge the kitchen, assembly room and dormitory spaces. It was enlarged again in 1909-10, to the north, east and west sides, leaving little evidence of the original building. George Coombs was the architect for all of these additions, and the later work was at least sympathetic to the original design in terms of materials and architectural details. Subsequent additions, of one and two stories in an institutional modern style executed in 1958, paid no attention to the previous work of either Fassett or Coombs.

The interior has been extensively renovated, most recently in 1958 and 1981. Two of the more significant rooms retain their original character: the amusement hall and the library. The theater space remains largely intact from the original Fassett design, as expanded by Coombs, with ceiling trusses, stage and balcony still in place. The library features extensive wood paneling and six windows with colored art glass panels.

The building as it exists today is in generally good condition, but is out of character with the other AMHI central campus buildings because of the extent of anachronistic additions. Early photographs provide ample evidence that a Central Building restored to its 1886 appearance would play a key role in any revitalization plan for the historic AMHI campus.

## Structural

This building consisted of a three story center building with one story additions on each side. The roof of the center section consisted of full span wood trusses supported on exterior brick bearing walls.

Both the floor and the roof of the kitchen area have been reinforced and appear to be in good condition.

## Electrical

The central building has a 1600 A, 240 V, three phase, three wire switchboard which appears to be an ungrounded system fed from a 300 KVA transformer in the basement This switchboard feeds the kitchen electrical room. equipment, mechanical equipment and elevators in the Central, Stone and Administration Buildings. The Central Building also has a 600 A 120/240 V single phase distribution panel fed from a 100 KVA transformer. This distribution panel feeds lighting and receptacle panelboards throughout the building. A third 600 A, 240/120, single phase distribution panel fed from a 100 KVA single phase transformer in the vault powers the third floor stage panels. motion picture camera and Tyson and Pavilion Buildings. The central building is now used as support space for AMHI as a kitchen, library and offices.

#### Mechanical

The service to the center building is adequate for the current use of the building. The addition of HVAC equipment would require the switchboard and conductors feeding the switchboard to be increased in size along with the transformers feeding the distribution panels. The existing lighting and receptacle panelboards are old but appear to be in fair condition.

A central air handling unit for heating and ventilation was installed with the addition to the first floor in 1957. Located in a penthouse over the kitchen area, the unit has water/glycol preheat and two zones of reheat, each with a separate supply fan. A single return fan is also located in the penthouse. The unit serves the first floor.

Coburn Hall has heating and ventilation as well as cast iron steam radiation. The basement and first floors have hot water perimeter radiation supplied from a steam to water heat exchanger installed in the basement in 1957. The upper floors have cast iron perimeter steam radiation. A first floor smoking room has several particulate filtration units. The first floor café has a large roof mounted exhaust

fan directly ducted to a single ceiling grille. Several compressors are located in the kitchen basement which serve cold storage rooms. Window air conditioning units are used in some areas.

The upper floors of this building have no fresh air ventilation and there are many areas with poor temperature control.

The balcony of Coburn hall has loose fiberous insulation and pigeon dropping littering the floor. Although the seating in this space is not used and its location is somewhat remote from main floor, it is likely to effect the general air quality of the room and provides a source of contamination for distribution by the air handling system.

The mechanical rooms in the basement do not have adequate ventilation and cause overheating throughout much of this space.

# Central Warehouse

Location: AMHI Campus
Inventory number: AUG022

Inventory number: AUG022 Gross area: 15,000 sf

Primary occupant/use:BGS-DAFS/warehouse

This structure is the lowest level of a former dairy barn, space enclosed by concrete block and roofed over with a flat roof. It is in fair condition. It occupies a key site on the campus, with substantial open space around it. It has no architectural or historic significance, and is not within the AMHI historic district.

# CETA Building (former AMHI Nurses' Quarters)

Location: AMHI Campus

Inventory number: AUG 017 Gross area: 20,646 sf

Primary occupant/use: DOL, MHMR&SA/offices

In 1927, architect Harry S. Coombs designed this Georgian Revival building to house nurses-in-training and graduate nurses who worked at AMHI as part of a trend toward improving the professionalism of the staff and providing comfortable quarters on the hospital grounds. The building was extensively renovated in the 1970's to house office workers, presently those of the Departments of Labor and

Mental Health, Mental Retardation and Substance Abuse. The building is in fair-to-good condition as it was sturdily built; but its small, dormitory-style rooms, narrow corridors, and narrow stairways, do not lend themselves well to office use. Mechanical and electrical systems, likewise, are not up to contemporary office standards. The building is not within the AMHI Historic District.

#### Structural

The hip roof framing of this building consisted of 2 x 10 wood joists at 16 inches on center. A 2"x5 3/4" tie joist connected every fourth joist at approximately 7'-6" above the ceiling. The exterior end of the joist was supported on a 33 inch high brick knee wall. The joist supported a tongue and groove wood deck. Additional tie joist will likely be required and the existing tie joist connections would likely need to be reinforced.

The floor framing was mostly concealed. In two locations, small areas of the framing were visible. At these locations, the framing consisted of an 8 inch deep beam or wire bar joist supporting a concrete slab. The slab was cast on a wire mesh "deck". The framing appears to be supported by interior and exterior brick bearing walls. The spacing of the framing was approximately 22 inches on center. The building is currently used as office space and appears to be adequately supporting this use. There was evidence of water infiltration in a few locations of the building, some of which can be attributed to leaking around windows. The exterior wire cut brick facade showed no signs of cracking although the mortar appeared to be quite granular and porous.

One area of the first floor appeared to be constructed of wood. This area was at the entryway and was more flexible than the other floor areas.

#### **Electrical**

The building service comes into the basement to a 400 A, 208/120 V, three phase main distribution panelboard via a 400 A service disconnect. The panel is fed from a pad mounted 75 KVA transformer. There are at least two distribution panels located on each floor of the building. The building is currently being used as office space with computers at each workstation.

The main distribution panel in the basement is old and the enclosure is rusting. Lighting and receptacle panelboards are in good condition and have sufficient space for additional circuits. The transformer feeding the building is adequate for current loads, but would have to be increased in size along with the main distribution panel if HVAC is added to the building.

The building is heated with steam fed cast iron radiation controlled through self-contained thermostats. The low pressure steam and condensate mains are located in the basement and branch up to feed the upper floors.

## Mechanical

The steam heating system has exceeded its useful life. There is no fresh air ventilation provided mechanically to this building.

# Deering Building

Location: AMHI Campus

Inventory number: AUG015 Gross area: 43,923 sf

Primary occupant/use:Dept. of Agriculture, ACES/offices

One of the larger AMHI buildings, the Deering Building occupies a strategic location on Hospital Street with good access to the street, parking, and the rest of the AMHI campus. It was built in 1959 to house 80 AMHI patients in isolation from infectious diseases. Once these diseases were largely eradicated and no longer a threat, the wards were turned over to male, long-term, acutely-psychotic patients. It now houses the offices of the Department of Agriculture. The building has no architectural or historic significance, exhibiting design characteristics that can best be referred to as institutional modern. It has been the subject of minor renovations to make it usable for offices: but it retains its hospital character and does not lend itself well to contemporary office standards. The Deering Building is not within the AMHI Historic District.

## Structural

Based on a review of existing drawings, the roof framing consists of bar joists supporting a 2 inch lightweight concrete plank deck. The bar joists are supported on interior and exterior masonry bearing walls. The floor framing consists of bar joists supporting a cast in place concrete deck. Discussions with staff indicate that several

years ago, when a new bald membrane roofing was installed, the roof was reinforced around the penthouse to support the snow drift. There are still small areas where water is noted, perhaps due to the masonry construction at the penthouse.

The building currently houses office use throughout. There appears to be no adverse affects on the building from this use

## Electrical

The building power is supplied from a 1200 A, 208/120 V, 3 phase switchboard located in the tunnels outside of the Deering Building. The switchboard is fed from a 300 KVA transformer in the Deering vault. The switchboard feeds distribution panels located on each floor of the building. The building is currently used as open office space with computers at each workstation.

The distribution system is adequate, but near capacity for current use. Increased mechanical loads in the Deering or Marquardt building may exceed the current systems capacity. Panelboards feeding lighting and receptacles are very old and are not clearly labeled. Lighting in office areas is adequate but corridor lighting needs to be improved.

#### Mechanical

The original heating and ventilating system, installed in 1956, is located in a single penthouse. Three supply fans draw in 100% outside air from a common plenum. The outside air is tempered by a single hot water/glycol preheat coil located directly behind the intake louver. The fans have steam reheat coils allowing for a total of thirteen zones of control: one zone on the ground floor, six zones on the first floor, and six zones on the second floor. A steam to water heat exchanger supplies the preheat coil.

The supply ducts run down the corridors and supply to individual rooms through sidewall diffusers. Steam booster coils provide heat for the rooms previously used for bathing and showering. Exhaust from each room flows through individual shafts up to a crawl space above the second floor. Exhaust for each half of the building is combined and exhausted through two roof mounted exhaust fans.

A steam to water heat exchanger located on the ground floor supplies perimeter hot water radiation. Supply and return mains are located in the basement. Modifications were done in 1984 to add control valves to existing hot water radiation and to add new radiation to the east side of the building. Separate toilet exhaust was added at that time. A chemical exhaust hood and a window air conditioning unit serve a first floor lab.

The air handling system, which uses 100% outside air, is very energy inefficient, even when the system is functioning properly. During the site visit, all three supply fans in the penthouse were shut off, leaving the building without mechanical ventilation. However, the glycol/water pumps serving the fresh air preheat coil were running and the supply from the heat exchanger had a temperature reading of well over 200 degrees. The outside air temperature at the time was in the mid 50's. All exhaust fans were operating, drawing unfiltered air through exterior doors.

# **DEP Response Building**

Location: AMHI Campus

Inventory number: AUG018 Gross area: 6,897 sf

Primary occupant/use:DEP Emergency Response

Unit/office & storage

The DEP Response Building has two wings: the south wing is an engineered metal building housing storage and laboratory space; and the north wing, a two-story vinyl-sided wood-frame building containing offices. Neither building is architecturally-distinguished. Both wings are in fair-to-good condition. The building occupies an attractive location at the south end of the campus overlooking the wooded banks of the Kennebec River.

# **DEP Storage Building**

Location: AMHI Campus

Inventory number: AUG020
Gross area: 5,000 sf
Primary occupant/use: DEP/storage

The Department of Environmental Protection moved this prefabricated hi-bay metal storage building to a site at the south end of the AMHI campus in the 1980's to house

emergency response equipment. It has no plumbing, heating, windows, or occupants.

# Doctor's Houses

Location: Hospital Street, AMHI Campus Inventory numbers: AUG051, 052, 053, 054, 055

Gross areas: uknown

Primary occupant/use: MHMR&SA/AMHI doctors'

housing

These five wood-frame single- or two-story residences can best be described as suburban-style ranch and "colonial" houses. They are of no historic significance and detract from the character of the original AMHI campus buildings and grounds.

# Engineering Building

Location: AMHI Central Campus

Inventory number: AUG077 Gross area: 22,107 sf

Primary occupant/use: AMHI Facilities/offices and utilities

The building group formerly known as the "Engine Room" includes office space for the facilities group, storage, and the magnificent, historically- and architecturally-significant boiler room and welding shop. It is likely that the central heating plant will remain to serve whatever uses are in store for the AMHI campus buildings, unless a change in the nature of heat provision is determined. The present power house complex dates from 1897, when it replaced one built in 1861 (the earlier boiler house became the carpentry shope in 1897, but was destroyed by fire in 1906). It was designed by Coombs, Gibbs & Wilkinson, and included the coal pockets, a series of massive underground masonry vaults used to store coal for firing the boilers, built into the hillside to the west. The centerpiece of the complex is the magnificent boiler room which is an immense room open to monitor skylights four stories above the floor. complex has been expanded and updated through renovations in 1922, 1935, 1956 and 1964.

## Structural

The hip roof has recently been investigated by another consultant in anticipation of reroofing. The upper floor was framed in wood, although the type of framing was not determined. The floor was uneven in some areas. Interior bearing walls showed no signs of distress. There was

evidence of water infiltration at the ceiling as a result of the leaking roof

In the boiler room, several areas of the wood ceiling were missing and maintenance personnel indicated that sections of it continue to fall. The roof framing consists of a 4 full span steel trusses supporting a wood deck. The trusses are supported on tall brick bearing walls.

The oil storage area consisted of a steel frame supporting a vaulted brick roof Most of the roof showed evidence of water staining. The columns were covered with a cementitious material that was spalling off. The floor area under the active tanks was constructed of concrete which appeared to be in good condition. The remaining area under the older tanks was gravel and large patches of oil were noted. There is no provision for secondary containment in the area. The walls are primarily granite and on the south side, most of the building is below grade. This area of wall allows water to seep into the building.

# Farm Manager's House

Location: Hospital Street, AMHI Campus

Inventory number: AUG073 Gross area: 2600 sf

Primary occupant/use:MHMR&SA/residence

This red brick cape-style farmhouse, located on Hospital Street in front of the Campbell Barn, is currently used for patient care/housing. The house, which was built sometime between 1830 and 1850, was purchased in 1890, along with four acres of surrounding property, to serve as a residence for the Maine Insane Asylum farm manager. An ell was constructed in 1902 to provide farm employees with a kitchen, bathrooms, and dormitory space. Dormers were added at that time. The interior was completely renovated at that time, and again in 1970 and 1977. Thus the interior shows few traces of the original 19th century floor plan or details. The house is has been well-maintained and is in generally good condition.

## Electrical

The farmhouse has a 200 A main breaker panelboard in the basement fed from a small pole mounted transformer. Interior wiring throughout is Romax.

The current panel and wiring are appropriate for a residential use of the building, but converting the building to office space would require replacement of the existing system.

# <u>Greenhouse</u>

Location: AMHI Central Campus

Inventory number: AUG081 Gross area: 2,000 sf

Primary occupant/use:MHMR&SA/AMHI Maintenance

The greenhouse, with its attached brick and granite service building, was erected in 1909. It reflected an ongoing awareness on the part of the Hospital's board of trustees that the grounds of the institution required landscape improvements, both to creat a pleasant environment for the patients and in order to make the hospital attractive to visitors. There was also a policy to provide income for the hospital and provide opportunities for patients to develop skills in raising plants. The building is used only sporadically today, and is in need of rehabilitation.

#### Structural

The main stone building consists of brick and stone bearing walls along the perimeter supporting an attic space and the hip roof The hip roof and attic wood framing is in need of replacement due to the constant moisture exposure. The attic framing is supported by a series of beams and columns running through the middle of the structure. This is not likely part of the original structure and could be eliminated in the renovation.

Attached to the stone building and connected to one of the greenhouses is a wood storage building. This building is of poor construction and, because it is subject to drifting and sliding snow from the stone building, should be reconstructed.

The two greenhouses are each framed differently. The larger one has a series of proprietary metal frames supporting wood furring strips and the plastic sheathing. Several of these frames were completely rusted through and require replacement. The smaller greenhouse had a framing system of round steel bar beams and columns supporting wood cant strips and the plastic sheathing. The columns of this structure also supported the elevated flower beds./ The flower beds are constructed of concrete and show signs of cracking and settlement The floor of both structures was a

combination of concrete and gravel. The walking surface was in poor condition and will need to be replaced. There was evidence of erosion in several places. This condition would require correction by installing an interior drainage system for the greenhouses.

## Electrical

It is our recommendation that the greenhouses floors and flower beds be reconstructed, including provisions for drainage. The greenhouse structures appear to be suffering from the high moisture. Elements which are rusted through or rotted should be replaced. Cracks at the foundation should be sealed.

The greenhouse has a small residential panel fed from a pole mounted transformer. There are no existing fire alarm devices in this building.

Power distribution is old but seems to be adequate for the buildings present use. Lighting is in poor condition.

# Greenlaw Building

Location: AMHI Campus

Inventory number: AUG037 Gross area: 49,780 sf

Primary occupant/use:MHMR&SA/AMHI offices and

services

Greenlaw is a 1955 modern building within the historic context of the central building grouping of the AMHI campus. It is a relatively non-descript flat-roofed masonry building with an unusual "y"-shaped floor plan. It was constructed to house 150 geriatric female patients. Its interior is institutional and utilitarian and has changed little in spite of changes in use. The building is now seeing some renovation, having received little attention since its construction.

#### Structural

The structural system for this building appear to be a steel frame supporting steel bar joists and a concrete deck. The exterior facade of the building was constructed of brick. The roof had one penthouse and a ballasted roof membrane. Some ponding was noted on the roof and the stone ballast was missing at each comer of the roof, likely due to the high wind loads at these areas. In one corner, the roofing membrane was moving due to the light wind blowing the

day of the site visit. The mechanical floor consisted of 6 inch thick reinforced concrete. There did not appear to be any steel framing in this area. Several pieces of mechanical equipment were running and the slab vibration was minor.

At the second and third floor, the floor slab was cracked near the area where the two wings meet. This cracking could be a result of temperature changes near the outer wall of the building or could be due to differential wind induced displacement of the two wings of the building. This condition requires additional investigation.

Currently, most of the building is occupied by office space and there appears to be no detrimental effects on the building associated with this use.

#### **Electrical**

The building has a 600 A, 208/120 V, three phase plug in bus duct fed from a 100 KVA transformer. Lighting and receptacle panel boards are fed from this bus duct and distributed throughout the building. The building is not fully occupied but has some office space and a daycare on the third floor.

#### Mechanical

The existing plug-in bus duct is in fair condition but is in a bad location. The transformer and the bus duct would be inadequate if HVAC equipment is added or use of Tyson building changes. Current lighting is in fair condition but for office lighting fixtures should be upgraded.

Located in a single mechanical penthouse, two air handlers installed when the building was constructed in 1955 provide heating and ventilation, each serving half of the building. Renovations were done to the system in 1984 to allow for return air/economizer operation in place of the original 100% outside air configuration. Outside air is introduced directly into the penthouse through two sidewall louvers, controlled by motorized dampers and preheated by hot water/glycol coils. This air mixes in the open penthouse with return air delivered by two return air fans and eventually flows into the air handler intakes. In the economizer mode, 100% outside air is used and two remote roof top exhaust fans provide exhaust. Each air handling system has three separate steam reheat coils. Supply air is then ducted down through the building on each side and above corridor ceilings on the first, second, and third floors

to sidewall grilles in individual rooms. A second set of duct mounted steam booster coils serve north facing rooms. Return air is ducted back through masonry chases. Toilets are exhausted separately through roof mounted fans. Hot water for the preheat coils is generated by a steam to hot water/glycol heat exchanger located in the penthouse.

A perimeter hot water heating system was installed in 1975. A steam to water heat exchanger and circulating pumps are located in a basement mechanical room. The system supplies baseboard radiation serving the south side of the first, second, and third floors. The basement is heated by a combination of steam radiators and unit ventilators installed when the building was constructed in 1955. A day care center on the top floor is cooled through window air conditioning units.

The mechanical systems in this building have been modified, reconfigured, and supplemented throughout the years and none of it serves the building very well. Many of the occupant complained that they were either too hot or too cold. There were a number of indoor air quality complaints. Air from the supply grilles has left dark smudges on the ceilings, indicating dirty ductwork. Air supplied from soffits located in the center of the building does not reach perimeter spaces, especially on the first and second floors where modular office partitions have been installed in the formally open dorm areas. Since there are considerable amounts of glass on the south wall, solar heat gain can make this side of the building quite uncomfortable. The daycare center on the top floor is kept fairly cool by the use of numerous window air conditioning units

Much of the basement has inadequate ventilation for office occupancy.

# Harlow Building

Location: AMHI Campus

Inventory number: AUG012 Gross area: 32,926 sf

Primary occupant/use:Dept. of Conservation/offices

The construction of Harlow and the now demolished Sanborn buildings represented a new direction both in terms of the design of new structures and the choice of an Architect on the AMHI Campus. The Legislature authorized the trustees to instruct George M. Coombs of Lewiston in 1888 to design two new buildings for patients. These structures, constructed behind the Females and Male Pavilions in 1888-89, each provided accommodations for 100 patients. Both dormitories featured the latest heating and ventilating systems, as well as the most fashionable architectural style for institutional buildings, Richardsonian Romanesque. Other improvements included large circular bays and the by now standard sleeping quarters in the attic spaces for employees. The elevated brick corridors provided a link to the other buildings in the complex.

In 1904 chronic roof leaks led to the additions of four foot wide copper aprons above the eaves and large copper ventilators on the ridges. Fireproof staircases were added in 1905. In 1913 Harry S. Coombs designed enclosed sleeping porches for the east side of the building. Plans for interior renovations were also made by Harry Coombs in 1917. In 1968-70 the building was extensively remodeled for office space, with bunker & Savage as architects. At the same time, the Sanborn Building was demolished.

## Structural

The roof is constructed of 1 3/4"x 7 3/4" wood joists spaced at 24 inches on center. The joists support a wood deck and are in turn supported by 6"x8" wood beams. Batter columns are regularly spaced in the areas inspected. The roof appeared to be sound and there was no evidence of water damage.

The floor framing was not visible but, given the amount of equipment currently supported by the system, they appear to be performing adequately.

It appears that both the roof and the floor framing are supported on brick bearing walls. The condition of the brick, where it was exposed, looked sound, except in the area above the porch roof at the third floor. At this location, there was considerable evidence of water intrusion. The plaster in some areas was completely removed from the wall and the exposed brick mortar was soft. It is likely that there are other areas in this condition that are still covered by the plaster. Further investigation of this condition is suggested.

The two story porch area was in poor condition. It was noted that a consultant had already performed a study of the required renovation of this space and, therefore, no inspection was done in this area.

## Electrical

The Harlow Building has a 400 A (350 A main breaker), 208/120 V, three phase distribution panelboard fed from a 75 KVA pad mounted transformer. The main distribution panel feeds lighting and receptacle panelboards on each floor. The building is currently used as office space with computers in each office and in reception areas.

The current service to the building is adequate for present use. Receptacle and lighting panels are small but have adequate space for current use as office. Addition of HVAC equipment to the building would require the transformer and main distribution panel to be increased in size as well as additional panelboards to power mechanical equipment.

## Mechanical

The air handling system was installed in 1968. A single multizone air handler, using steam heat, serves the entire building. The unit, located in the basement, has ten zones. The supply air ducts run through the basement, branching to serve each room through individual risers located in the original gravity system ventilation shafts in the masonry walls. Four of the zones serving large rooms on the first and second floors have steam reheat coils. Return air flows from the rooms into a separate set of risers up to the attic, where it is ducted to a fan and, through motorized damper control, it is either exhausted to the outside or returned to the air handler. Steam radiation serves select areas including the old porch and ends of the corridors. The fourth floor was more recently renovated. This space is heated with steam baseboard radiation with only a minimal amount of air supplied from the multizone system.

The poor performance of the heating and ventilating system has helped make this building quite uncomfortable for its occupants. There is a great deal of temperature variation throughout the building. Adjusting thermostats up for cooler areas will overheat others. The system's supply air quality is an issue. The fresh air intake to the air handler is located slightly below grade. Water leaks into the intake plenum, creating a place for microbiological growth. The

supply duct risers were observed to be quite dirty. The fourth floor has inadequate fresh air ventilation for office space occupancy.

The exhaust/return fan in the attic has poor vibration control and creates noise problems for the office below. The return air ductwork in the cold attic space is uninsulated.

Poor condensate control in the steam pipes causes hammering.

The floor drains from the old bathing rooms (now converted into office space) were never disconnected from the sewer piping and emit sewer gas when the traps dry up.

# Laundry

Location: AMHI Central Campus

Inventory number: AUG076 Gross area: 9,746 sf

Primary occupant/use:MHMR&SA/storage

A relatively-modern and nondescript masonry building, the AMHI Laundry was constructed in 1954, according to plans prepared by Bunker & Savage, perhaps as an extensive renovation of an earlier laundry designed in 1906 by Coombs & Gibbs. It is attached to the Engineering Building/Warehouse complex and is centrally-located within the main campus building group. It is in good condition and represents light and airy high-bay industrial space. It is currently underutilized as storage for surplus AMHI furniture and equipment.

## Structural

The flat roof framing consisted of structural steel bar joists supporting a concrete plank deck. It was noted that the roof was being reinforced and reroofed based on another consultants report. The exterior masonry walls were in fair condition. Several cracks were noted in the masonry and in some places the mortar was in poor condition. The concrete, slab on grade appeared to be in good condition with minimal cracking.

## Electrical

The laundry has a 1200 A, 480/277 V, three phase switchboard fed from a 150 KVA transformer in the Greenlaw vault. The switchboard feeds the boilers and

other associated mechanical equipment, laundry equipment, lighting panel and transformers feeding 208/120 V panels.

The service for the laundry and boilers is adequate size for present loads. Main distribution panel is fairly new and has sufficient space and capacity for additional loads. Panel boards located throughout the boiler room and laundry areas are old and directories are not clearly labeled.

# Machine Storage Building

Location: AMHI Campus

Inventory number: AUG075 Gross area: unknown

Primary occupant/use:MHMR&SA/storage

This concrete block utilitarian structure is of no architectural or historical value. It is used for storage of supplies and AMHI maintenance equipment.

# Marguardt Building

Location: Hospital Street, AMHI Campus

Inventory number: AUG031 Gross area: 60,149 sf

Primary occupant/use:MHMR&SA/offices

The Marquardt Building was constructed in 1959 to house 160 beds for female long-term, acutely psychotic patients. Designed by Bunker & Savage, it is an institutional Modern building with exterior walls of brick, concrete block and granite with mill-finish aluminum door and window frames. The building has been substantially renovated for office use, and is currently undergoing further renovation to continue in use as office space for State agencies and to provide services for campus workers.

## Structural

This building was constructed at the same time as the Deering building, and it is assumed that the

construction is similar. In most areas, finishes precluded a visual inspection of the framing type.

The ballasted roofing appears to be relatively new. It is likely, based on the Deering building, that

if the roof was not reinforced in the past near the penthouses, this will be required.

In one area of the first floor, it was noted that some of the cmu was cracked. Nearby, a section of the slab on grade

had settled, leaving some cracking and depressions in the slab. This area should be repaired and the cause of the settlement determined. The exterior foundation wall is exposed for several feet. Evidence of efflorescence was found and it is likely that the foundation would need to be coated to prevent moisture from deteriorating the concrete.

Currently, the building houses office space on the 3rd floor. The 1st and 2nd floor were used by patients up until a few months ago.

## Electrical

The building has an 800 A, 208/120 V, 3 phase switchboard in the first floor electrical room. The switchboard is fed from an 800 A breaker in a section of the Deering switchboard. The Marquardt switchboard feeds distribution panels located throughout the building. The first floor of the building is un occupied and the second and third floors are used as office space with a high concentration of computers.

The existing switchboard is in violation of the National Electric Code in that it has more than six breakers with no service disconnect. Size of the existing service is adequate for the existing use of the building, but would be exceeded with the addition of HVAC equipment. Fire alarm notification device locations appear to comply with NFPA standards.

## Mechanical

The building has four air handlers; one serving the south side, one serving the center section, and two serving the north side. The air handlers, all but one installed when the building was built in 1956, are located in three separate roof top mechanical penthouses. They are configured similarly with glycol/water preheat coils and separately ducted supply with steam reheat for each floor. The glycol/water is supplied from a steam to water heat exchanger located in the center penthouse. Supply ducts run above corridor ceilings throughout the building, delivering air to individual rooms through sidewall diffusers. Return air is ducted back from the south and central units and parts of the north unit. The second north air handler, more recently installed, uses 100% outside air with heat recovery from exhaust.

Steam from the central plant is also supplied to a heat exchanger to generate hot water utilized by a combination of radiant ceiling panels and perimeter baseboard located in each room. The baseboard radiation, along with individual room thermostatic control, was installed in 1982.

Air conditioning is provided in localized areas on the occupied third floor through window air conditioners mainly serving the north and central sections. A separate conditioning unit, pad mounted outside, serves a basement area used for video taping.

Although the ventilation in this building is better than many of the other buildings, overheating in the summer and poor individual space temperature control are problems here as well. Only the third floor is occupied at this time. However, all three floors are configured similarly and would likely experience similar problems when occupied as office space. Indoor air quality is an issue with the third floor occupants. This may be, in part, due to the fiberglass batt insulation just above the perforated metal ceiling. This insulation has been disturbed over the years and fibers are stirred from elevator relief air. There is a likely possibility that fibers are filtering down into occupied space.

# Medical Examiner's Building/Morgue

Location: 34A Hospital Street

Inventory number: AUG091 Gross area: 8,157 sf

Primary occupant/use:Attorney General / State Medical

Examiner's Office and State Morgue

The Medical Examiner's Building is also a newer building in fine condition. It features shed roofs with walls of brick and ribbed metal panels. It is built into a steep slope, so that office areas are accessed from the upper, Hospital Street level, while the morgue/autopsy/lab spaces are accessed from a driveway and lower grate entrance. The building is in good condition except for persistent problems with the HVAC system.

# Norton House

Location: Hospital Street, AMHI Campus

Inventory number: AUG074 Gross area: 1400 sf

Primary occupant/use:MHMR&SA/residence

This wood-frame sided house, also located on Hospital Street near the Campbell Barn, appears to have been another AMHI farm house. It is newer and more substantially altered, and less important from an architectural viewpoint than the Farm House. State sources revealed little about its history.

## Old Max

Location: Arsenal Street (Kennebec Arsenal property)

Inventory number: AUG002 Gross area: 16,929 sf Primary occupant/use:DHS

The building now known as the "Old Max" was constructed in 1908 as the Maximum Security Building. It sits high above the original Kennebec Arsenal buildings, and was added to the AMHI physical plant shortly after the Arsenal site and buildings were deeded to the State. Occupants have a commanding view of the Kennebec, downtown Augusta, and the State House; and in turn, the building is highly visible from the Capitol. It was designed in an austere Romanesque style by George M. Coombs.

The original building was constructed of brick and granite, and it is very much in keeping with its neighbors on the Arsenal grounds. It was originally designed to be two wings with an entrance pavilion and stairway in the center. However, apparently budget constraints entered in and only the north wing and the stair tower were completed. In 1983, an addition was constructed at the south end of the building to provide a code-compliant exit stair and an elevator serving all levels.

The interior, although extensively renovated, exhibits its origins. Thick walls, barred openings, and narrow doorways betray the maximum security cells of its previous occupants. In spite of these reminders, the building today, equipped with recently-installed mechanical and electrical systems, serves DHS office employees. The building is not within the Kennebec Arsenal Historic District.

## Structural

Much of the roof framing was concealed. One end of the building was accessible and the framing in this location consisted of sloped steel beams connected near the ridge and supported in the middle by a steel column. The steel

beam was connected to the exterior bearing wall with a structural tee bolted to the top of the wall. No cap plate was noted at the top of the column. The roof deck consisted of wood decking and was concealed by rigid board insulation. The concrete slab at the attic floor appeared to be in good shape with some cracking.

The floors appeared to have steel beams supported on brick bearing walls. The floor deck appeared to be a 4" concrete slab. One area of the first floor had been repaired. Several beams in the maintenance area in the basement had a cementitious cover that was spalling. Several areas in the basement experience leaking. The bearing walls appeared to be sound. The slab at the first floor appeared to be in good condition. The building currently serves as office space and appears to be performing adequately.

One entrance on the west side is subject to drifting and sliding snow from the roof above. The framing of this roof was concealed but showed no signs of distress.

## Electrical

The Building service comes into the basement to a 400 A service disconnect, and then to a 200 A, 208/120 V, three phase distribution panel, the elevator and a 60 A panel. The transformer for the service is a 75 KVA pad mounted unit. There are lighting and receptacle panelboards on each floor fed from the 200 A main distribution panel.

The current power distribution system is adequate for present building loads, but addition of HVAC would require that the transformer and main distribution panel be enlarged.

#### Mechanical

This building, although remotely located, receives high pressure steam from the central boiler plant. The first four floors of this building are served by a heating and ventilating system installed in 1970. The constant volume air handler is located in the basement and contains a hot water/glycol coil supplied from a steam to water heat exchanger. The air distribution system has four zones, vertically dividing the building into quadrants. Each zone has a steam reheat coil. Air is ducted vertically to individual rooms through shafts used as part of the building's original air system and located in the masonry walls. Return air flows up through similar shafts to the top

floor. Three return fans, located in a very crowded mechanical space, return air back to the air handler.

A split system air conditioner serves an area of the second floor which currently has a large computer load. Perimeter steam radiation serves the fifth floor, which has no mechanical ventilation. The entry lobby has a steam unit heater. The stair tower has no ventilation.

Poor indoor air quality has plagued the occupants. Filter media has been attached to the outside of supply diffusers in an attempt to control particulate discharge from the air handling system. However, this also acts to restrict air flow. With only four reheat zones, it is impossible to properly control individual space temperature. Overheating is a problem in the summer. The south facing, glass enclosed stairwell, which is partially used as office space on some of the landings, was uncomfortably hot during the site visit even though the outside temperature was in the low 40's.

# Paint Shop

Location: AMHI Central Campus

Inventory number: AUG079 Gross area: 2,400 sf

Primary occupant/use:MHMR&SA/AMHI Maintenance

This utilitarian 1897 story-and-a-half brick building, part of the AMHI engineering complex, was originally constructed as a plumbing, paint and upholstery shop, and also served as a blacksmith shop. It was designed by Coombs, Gibbs & Wilkinson, and features masonry walls with Colonial Revival detailing, and a slate hip roof with dormers. The building appears to be in generally good condition.

## *Electrical*

The paint shop has a small residential distribution panel for lighting and receptacles. There are no fire alarm devices in the building.

Service to the building seems to be adequate. Additional mechanical equipment would require the service to be increased in size. Fire alarm system and emergency lighting do not comply with current NFPA requirements.

Public Safety Building

Location: 36A Hospital Street

Inventory number: AUG082 Gross area: 20,160 sf

Primary occupant/use:Department of Public Safety/offices

The Public Safety Building is a 1940's institutional modern three-story brick building, which was expanded to the south in the 1960's. It occupies a prime piece of what used to be Kennebec Arsenal property on Hospital Street with westerly views across the Kennebec Valley toward the Capitol Complex. It was solidly built and is in good condition, but has not been renovated since the 1960's and does not serve today's DPS well. Finishes are well-maintained but worn, and the building is overcrowded and cluttered. Air quality is a persistent problem, and there is no elevator. There is a small museum in the basement, displaying police uniforms, insignia and equipment from departments around the world. This exhibit deserves wider attention than it gets in its present location in the basement of the building.

# Ray Building

Location: AMHI Campus

Inventory number: AUG019 Gross area: 61,793 sf

Primary occupant/use:Department of Environmental

Protection/office

The Ray Building is the largest single building on the AMHI campus. It was constructed as patient dormitory space to the design of John Calvin Stevens in 1935. As originally constructed, it housed 150 men and 150 women on three floors. The brick exterior with slate roof features Georgian Revival details, while its overall form and character is in sympathy with the neighboring Romanesque Harlow Building. The building was renovated in 1974 while still used by the hospital; and again in 1981 and 1993 for office use. Although reasonably successful as office space, the building's institutional character remains close to the surface and makes significant compromises necessary for its occupants. The building currently meets most accessibility requirements.

## Structural

The roof framing consisted of 10 inch deep sloping steel bar joists at 42 inches on center. One end of the bar joist was supported on a brick knee wall. The other side was supported on each side of the ridge by a 14 inch deep channel. The channel was in turn supported by an A-frame made up of 3"x2 1/2"x 3/8" back-to-back angles spaced at 20 foot intervals. At the center and both ends of the building, the hip roofs were slightly higher and framed with structural steel beams supporting sloping bar joists. The underside of the deck was concealed with a rigid insulation board. No evidence of water infiltration was noted.

The floor systems consisted of a 10 inch thick waffle slab supported on the exterior bearing wall and a series of steel beams spanning the short direction of the building and spaced at approximately 19 feet on center. The building is currently used as office space and the floors appear to be capable of supporting the load. There were no signs of deterioration in the floor system.

## Electrical

The building has a 1000 A, 208/120 V, 3 phase switchboard located in the basement fed from a 300 KVA pad mounted transformer. The distribution panel has three breaker cavities each with a 600 A breaker feeding lighting an receptacle panels located throughout the building. One cavity feeds the north end of the building, one feeding the center of the building and one for the south end of the building. The present use of the building is office space with a computer at each workstations, and reception area.

Existing distribution system is adequate for present use as office space. The main switchboard breaker ratings have worn off and breakers are not labeled. Lighting and receptacle panelboards are in good condition but have very little or no space for additional circuits. Existing flourescent lighting is in good condition and provides adequate light for an office environment. Addition of HVAC equipment may require the existing service to be increased in capacity or a second distribution panelboard be added.

#### Mechanical

Most of the building is heated with the building's originally installed steam radiation only, with no air handling systems for ventilation. There are two exceptions to this. (1) The north half of the basement is served by a heating and ventilating unit, installed in 1993, and located in a basement mechanical room. The unit has a steam heating

coil and distributes air to office areas through exposed ductwork. Also located in this area are three small split system air conditioning units serving separate computer rooms. (2) The meeting rooms on all three floors adjacent to the central elevator are served by a heating, ventilating, and air conditioning system located in the attic. This system has three zones, with split system cooling coils and steam heating coils. High pressure steam is reduced to low pressure in the basement and piped to the attic, where four control valves divide the building into quadrants. Branch steam pipes run down from the attic in channels cut into the exterior walls. Steam radiators on each floor are fed from these drops.

Except for the north half of the basement and central meeting rooms, which are served by a dedicated heating and ventilating units, there is no fresh air ventilation provided mechanically to this building.

The perimeter steam radiation and controls are well past their useful life and should be replaced. Greater control over individual spaces is needed.

According to the occupants, the split systems installed in basement computer areas provide enough cooling for the current sensible cooling loads.

The ductwork associated with the basement air handler runs exposed through office areas, impacting office aesthetics.

# Sleeper Gymnasium

Location: AMHI Campus Inventory number: AUG046 Gross area: 11,725 sf

Primary occupant/use: AMHI patients and staff/recreation

The 1990 Sleeper Gymnasium is connected to the Williams Pavilion and provides a gym, exercise rooms and showers for AMHI patients and employees. It also includes a kitchen for teaching food preparation. Although austerely modern in design, the building features polychromatic brickwork and postmodern details in an effort to relate it to the historic AMHI structures surrounding it.

## Structural

The gym is the newest building on the AMHI campus. A visual inspection of the building found it to be in excellent

condition. There was no evidence of settlement, cracking or water intrusion in either the gym or the connector.

#### **Electrical**

The building has a 400 A, 208/120 V, three phase main distribution panel fed from a 400 A breaker in the Elkins Building switchboard. The 400 A distribution panel feeds a kitchen panel, lighting panels and mechanical equipment.

The present distribution system has capacity for additional loads. Building is well suited for its current use.

## Mechanical

The gym has a roof-top air handler with a steam heating coil and two sidewall exhaust fans. The locker rooms, toilets, and smaller rooms off the gym have hot water radiation with individual room control and roof or ceiling mounted exhaust fans. Hot water is supplied from a steam to water heat exchanger.

Existing systems are in good condition and appropriate for the building occupancy.

# Surplus Property/Root Cellar

Location: AMHI Campus

Inventory number: AUG021 Gross area: 9,152 sf

Primary occupant/use:BGS-DAFS/warehouse and surplus

property storage

This former AMHI barn occupies a key site on the campus and is a reminder of AMHI's self-sufficient agricultural past. It has substantial open space around it. It is built of typical wood barn construction on a brick and granite foundation. Interior spaces include a small office area with a restroom. The building's physical condition is fair. The building is not within the AMHI historic district.

# State Crime Lab

Location: 34 Hospital Street

Inventory number: AUG090 Gross area: 11,100 sf

Primary occupant/use:Dept. of Public Safety/offices and

lab

The Crime Lab is a relatively new building in excellent condition. It was constructed in 1986 according to plans

prepared by Harriman Associates. It is a modern masonry and steel building designed expressly for its purpose, nicely sited and landscaped on the sloping former Arsenal site.

State Police Garage

AUG083 Location: 36A Hospital Street (rear)

Inventory number: AUG083 Gross area: 10,501 sf

Primary occupant/use: Department of Public

Safety/Vehicle maintenance and

offices

This masonry and steel building is part of a cluster of buildings housing the Department of Public Safety. It was built in 1957 and has not seen any renovation since. The upper floor houses offices and vehicular maintenance areas. The lower level, which opens only to the west due to the hillside site, includes storage and vehicular maintenance space. The building is in fair condition, with worn and obsolete doors and windows, obsolete plumbing systems, and a garage floor that appears to be structurally-deficient. The functional capabilities of the building do not appear to match the requirements of a contemporary vehicle service garage.

## Stone North

Location: AMHI Central Campus

Inventory number: AUG063 Gross area: 87,200 sf

Primary occupant/use:MHMR&SA/AMHI

One of the wings of the Stone Complex and attached to the Administration Building, the first wing of what is now called Stone North was the original female patient wing constructed along with the Administration Building according to John Lord's 1836 plans. The second extension was erected to the designs of Henry Sawyer, starting in 1850 and completed in 1855, along with a complete renovation of the original women's wing of the Administration Building. Another wing, and the last extension of the Stone Complex to the north, was designed by Francis Fassett and completed in 1866. The interior spaces have been continuously renovated for general upgrading and to reflect changes in treatment plans over the years, but the exteriors have changed little. The most extensive interior work occurred from 1903 - 1914 during

the George Coombs-directed hospital-wide renovations extending from 1892 to 1916. Although mechanical and electrical systems, clinical casework, stairs and elevators have all been upgraded through the years, the basic floor plans have changed little, in part due to the solidity of the original construction.

# Electrical (Stone North and South)

The Stone buildings are fed from a 300 KVA transformer via a 1200 A switchboard in the Central Building electrical room. Breakers in the switchboard feed lighting, receptacle and air-conditioning panels located throughout each of the three units in the Stone North and South buildings. Each of the Stone buildings also has a single phase 120/240 feed from the same 600 A distribution panel as the Administration Building. The two Stone buildings currently house patients for AMHI.

The current transformer feeding the Stone Buildings is adequate to supply the existing loads, but will not supply the recommended mechanical equipment. The current switchboard has the capacity to handle present loads but may need to be enlarged depending on the amount and size of mechanical equipment used for cooling. The distribution panelboards are old but appear to be in fair condition.

## Mechanical

Each of the three Units are heated and ventilated through separate mechanical systems installed in 1973. Located in the basement of each Unit is: a steam to water heat exchanger, hot water circulating pumps, and an air handler. Hot water from each heat exchanger serves both perimeter radiation located throughout the Unit and the air handler heating coil. The hot water temperature is reset manually. Hot water is supplied to perimeter radiation from the basement of each unit, up through the three floors, to a reverse return loop in the attic. For temperature control, the Units I and II are divided down the middle into two zones. Dining and activity areas are controlled separately in Unit III.

All three air handlers in each unit utilize 100% outside air to provide building ventilation. Supply air is heated and humidified at the unit and ducted up through the original sturdevent system masonry chases to each room. This air

flows out of the building through similar chases to the gravity relief system in the attic. Separate exhaust fans serve toilet areas. Air conditioning is provided in localized areas through window air conditioners and water cooled air conditioners.

The air handling systems provide adequate fresh air ventilation. However the mechanical systems as a whole provide poor temperature control. The two zones of perimeter radiation control in Units I and II can not handle the room to room load variations.

The hot water return piping is located in cold attic space, adding significantly to heat loss.

The masonry chases extending up through all three floors, conveying supply and exhaust air, do not have fire dampers. This is in violation of the NFPA 90-A

The short floor to structure heights severely limits the ability to install horizontal runs of ductwork.

# Stone South

Location: AMHI Central Campus

Inventory number: AUG064 Gross area: 79,156 sf

Primary occupant/use:MHMR&SA/AMHI

Stone South consists of the original male wing, constructed in 1836-40, and two extensions to the south and southeast. The first of these additions was designed by Henry Sawyer and constructed in 1854-55; the second was designed by Francis Fassett and completed in 1870. The first and second wings were destroyed by the fire of 1850, and were rebuilt in 1851-52. As with Stone North, Stone South has undergone continuous renovation projects down to the present day. Both Stone North and Stone South contribute to the impressive scale and style of the entire Stone complex and relate the history of the institution to contemporary viewers. The simplicity of their design and quality of construction merit equally large-scale planning efforts to assure their continued use by the State of Maine.

## **Electrical**

(see Stone North on previous page).

## Mechanical

The mechanical systems in Units I and II were also renovated in 1973 and are similar to those in Stone North. The mechanical system in Unit III was renovated in 1987. Perimeter hot water radiation is valved for individual room control. Ventilation is provided through a unit ventilator located on each floor, supplying air mainly to the dayroom and corridor.

The mechanical system issues for Stone South are similar to Stone North with the exception of Unit III, which has better perimeter radiation control and no air distribution between floors requiring fire dampers.

# Tyson Building/Female Pavilion

Location: AMHI Campus

Inventory number: AUG016 Gross area: 36,384 sf

Primary occupant/use:Department of Corrections/offices

In 1864 the trustees of AMHI began to consider a new approach to hospital design, which they referred to as "cottage system." This consisted of groups of small freestanding buildings for patients. A variation on this was the "pavilion plan," in which clusters of buildings were linked together by corridors or tramways. The cottage system was rejected as being impractical and not cost effective in terms of the number of separate structures which would have to Many trustees, however, favored the pavilion plan. By being smaller than traditional dormitories, these pavilions would provide more natural light and ventilation for the patients. Moreover, they were more domestic in scale, creating a less institutional environment. At the same time, they were linked together around a central administration building, thus maintaining centralized supervision. The efforts to build a new asylum along these lines led to a report and schematic floor plans for a new hospital complex designed by Francis Fassett, published in 1874.

Fassett was known to the trustees for his work on the third male and female wings, as well as the new Maine General Hospital in Portland. With little chance of the State funding the construction of an entirely new hospital, Fassett was employed to partially implement his concepts for the new buildings. Coburn Hall was the first structure built as part of the pavilion plan. It was followed by the Female and Male Pavilions, first designed in 1879. These three structures constituted the extent to which the Augusta Insane Hospital experimented with adoption the pavilion plan.

The completed building was in the High Victorian Gothic Style with Fassett had introduced for Coburn Hall. The new building featured a mansard roof with ornamented dormers, stair towers with pyramidal roofs, and broad open verandahs. The building had a capacity of 42 occupants and was reserved for patients who required only minimal restraint or supervision. Each floor had patient rooms, and at each corner there were suites to make private visits by friends and relatives more comfortable. Early attempts to make the structure fire-proof included brick partitions and concrete floors.

In 1920 Harry S. Coombs was hired to design a Georgian Revival addition on the north side, called Tyson Hall. The male and female pavilions were joined together by 1949 with the addition of the Ekins wing, containing surgical and infirmary spaces.

The female pavilion/Tyson Wing was rehabilitated in 1999. The building now contain modern and functional office space housing the administrative offices of the Department of Corrections and a variety of agencies temporarily relocated as a result of the renovation of the State Office Building.

# **Electrical**

The building power is supplied from the same breaker in the Central building as the Williams Pavilion building. A second feed to the Tyson building is from the plug-in bus duct in the Greenlaw basement. Two load centers on each floor of the building provide power for lighting and receptacles.

The building is currently unoccupied but power to the building remains. If the building were to be used than the supply to the building would be above capacity. Load centers on each floor of the building are new, but not suited for use in an office environment due to the limited number of breakers available. Existing lighting is in poor condition and should be replaced if building is occupied.

#### Mechanical

A new hot water heating system was installed in 1987. A new steam to water heat exchanger was installed to supply a hot water loop in the basement feeding up to convectors on all three floors. The rooms have individual thermostatic control. There is no fresh air ventilation in this building. The old air system was removed and the air shafts were sealed closed. On each floor, many of the old air shafts have been converted into closet space.

The perimeter hot water heating system is relatively new and, in general, appears to be in good condition. However, there is some damage is evident, especially to items such as wall mounted thermostats.

There is no fresh air ventilation provided to this building. This building has been completely abandoned but is heated to help prevent further deterioration.

The upper floors of the 1923 building have the original air distribution ductwork and steam radiation in place, which have far exceeded their original life. The central air handler has been removed, so there is no longer mechanical ventilation provided to these floors. The unit ventilators in the basement are also quite old. Due to age and deterioration, all these systems should be replaced.

This building has been completely abandoned but is heated to help prevent further deterioration.

Much of the ductwork which served the original ventilation system is still in place. The Sturdevent air handler has been removed and the system is inactive. The system was configured to duct air up through the three floors, branching to single supply ducts running down the center of each floor. Grilles were located on both sides of these soffited ducts to provide ventilation to the open floor plan. Building pressure forced relief air from each floor into air shafts where it was ducted to the attic and either vented to the outside or returned to the air handler. Steam piping mains run around the basement and feed up through the three floors to cast iron radiators located along the exterior walls. A large basement room has several steam heat unit ventilators.

#### Warehouse

Location: AMHI Central Campus

Inventory number: AUG078 Gross area: 32,176 sf

Primary occupant/use: MHMR&SA/AMHI storage

This building is a relatively modern two-story brick structure of nondescript design, constructed in 1961. There may have been other, earlier warehouse structures in the same location. The recent building does not contribute to, nor does it detract from, the historic buildings on the hill above it

#### Structural

The warehouse roof consists of a series of structural steel beams and columns supporting a 6" prestressed precast concrete plank. Several areas of water infiltration were noted although the integrity of the structural system did not appear to be compromised.

The second floor framing consists of a cast in place concrete frame supporting an integral slab. Both the slab and the framing appeared to be in good condition with no signs of cracking or spalling. The second floor is currently used for the storage of surplus property which appears to impose a considerable load on the structure. The ground floor slab appears to be in good condition with minimal cracking.

The exterior masonry bearing walls appeared to show signs of settlement at the comers. Considerable cracking of the masonry and water intrusion was noted along the walls.

#### Mechanical

The mechanical system, installed in 1958 when the building was constructed, provides heating only through hot water unit heaters. A steam to water heat exchanger and circulating pump are installed in the boiler room extension. Two small fans provide localized exhaust from the warehouse and a welding booth and associated exhaust was added at a later date in the extension.

Williams Pavilion

Location: AMHI Central Campus

Inventory number: AUG069 Gross area: 26,632 sf

Primary occupant/use:MHMR&SA / patient treatment and

offices

The Williams Pavilion is a Second Empire-style Victorian brick building that matches its twin, the Female Pavilion (recently renovated along with its newer north wing, the Tyson Wing), across an original campus courtyard. It is an important part of the original campus plan and is connected to many other campus building by enclosed connectors, both overhead and underground. Originally constructed as the Male Pavilion, it was designed by Francis Fassett and completed in 1884. The Male and Female Pavilions were the physical manifestations of the hospital administration's shift to the "pavilion plan" for the treatment of mentally-ill As opposed to the "dormitory" plan, which provided for ease of supervision but tended to too large and impersonal, and to the "cottage" plan, which were staffintensive but home-like, the pavilion plan represented a compromise position. The pavilions were free-standing small buildings, smaller than traditional dormitories but bigger than cottages, that allowed for plenty of windows for fresh air and ventilation, smaller patient groups, adequate supervision, and economical staffing.

The Williams Pavilion, the Male Pavilion and Coburn Hall were the extent of the hospital's experimentation with the pavilion plan. Fassett designed all three buildings as a result of a master plan he prepared for an entire new hospital complex based on the pavilion theory. broader plan was never implemented, but the three buildings that were constructed form the most interesting and composed outdoor space on the AMHI campus. All three were designed in the High Victorian Gothic style. The two pavilions featured a slate mansard roof with ornamented dormers, stair towers with pyramidal roofs, and extensive verandahs. Each of the two above-grade levels had patient rooms and a corner suite for friends and relatives. The wide corridors opening to a mid-hall lounge area and the large, tall windows give the interior a pleasant, open quality when compared to some of the other patient facilities of the institution. The building was designed to house 42 occupants, significantly fewer than the male and

female wings of the Stone Complex, all of which were designed to house 60 to 150 patients.

The interior floor plan remains intact, though most original trim and details have been lost to renovations. The exterior remains in close-to-original configuration with the exception of the northeast corner where connection to the modern Elkins Building was made.

#### Structural

The mansard roof framing consisted of 1 <sup>3</sup>/<sub>4</sub>" x 8 <sup>3</sup>/<sub>4</sub>" wood rafters at 21 inches on center. The rafter had an intermediate wood knee wall. The hip rafter was 3 <sup>3</sup>/<sub>4</sub>" x 9". One area of the roof had a turret that showed considerable signs of water damage.

The floor framing is constructed of wood, although it was concealed at all levels except the basement. The framing inspected in the basement consisted of wood joists supported on brick bearing walls. The joists in the corridor were 2"x9 3/4" at 15 inches on center. The center of the span has creeped considerable, in some places as much as 2 1/2" and at some point, the floor was leveled by adding a 3/4"x7" board to one side of the joist. The joists in each room was framed in the opposite direction as the corridor to brick bearing walls between each room. The joists were 2"x7 3/4" at 15 inches on center with no additional framing to level the floor. The floor deck consisted of 3/4" diagonal deck at the corridor and 3/4" deck perpendicular to the framing at the rooms.

The condition of the brick bearing walls an the basement was poor in several areas, particularly at the base. In several areas, the mortar joints are eroding away and in other areas, openings in the brick arches were not filled in.

There is evidence of water damage on the inside of the exterior wall near the joint in the mansard roof

The building currently serves as office space and patient support and appears to be serving the need adequately.

#### Electrical

One feed to the building is from a 200 A breaker in a 600 A, 120/240 V, single phase distribution panel in the Central Building electrical room. A second feed comes from the

switchboard in the Elkins building basement. There are distribution panels located on each floor of the building.

#### Mechanical

The existing service from the Elkins building is adequate for the current building use as is the feed from the Central building. Addition of HVAC equipment or if Tyson building becomes occupied the building power distribution system would not be large enough. Existing lighting and receptacle panels are old and poorly marked. These existing panels have little room or capacity for additional circuits.

A new hot water heating system was installed in 1987. A steam to water heat exchanger serves a hot water loop in the basement feeding up to convectors on all three floors. The rooms have individual thermostatic control. A free standing, water cooled air conditioner located in the center corridor area provides cooling to the first floor medical clinic. Except for a unit ventilator on the second floor, there is no fresh air ventilation in this building. The old air system was removed and the air shafts were sealed closed.

Except for a unit ventilator, there is no fresh air ventilation in this building. The perimeter radiation system appears to be in good condition and adequate for handling the building envelope heat loss. Infiltration of cold air through loose fitting windows is a problem in some areas.

#### Elkins Building

The framing for this building was concealed by finishes in most areas. The roof is flat and appears to be leaking in the area around the penthouse. The penthouse walls are constructed of brick. There are several cracks in the wall and there appears to be water infiltrating the building in this area. The floor framing was visible in the basement and consisted of steel bar joists ranging in depth from 8" to 12" and spaced at 24" to 28" on enter. The floor deck was concrete of unknown thickness and was cracked in some areas. The bar joists were supported on a row of beams and columns on each side of the corridor and on the exterior bearing walls. In the basement, masonry at two corners was cracked as well as the slab at the first floor.

A two story addition was constructed in one area of the building. The addition appeared to be in good condition with the exception of water infiltration at the foundation.

#### **Electrical**

The Elkins building has a 1000 A, 208/120 V, three phase four wire switchboard located in the basement. The switchboard is fed from a 150 KVA pad mounted transformer. The main switchboard feeds a 400 A, 208/120 V, three phase panel which feeds distribution panelboards on each floor of the building and has one feed to the Williams Pavilion building.

The existing transformer feeding the building is at its capacity for current loads in the building. The switchboard is in good condition, the 400 A distribution panel is old but in fair condition, lighting and receptacle panel boards are in fair condition. With a larger transformer the switchboard would be large enough to handle additional HVAC loads.

#### Mechanical

Manually controlled steam radiators provide perimeter heating throughout the building except for the 1971 first floor dental laboratory addition. Steam and condensate mains are located in the basement, feeding up to the floors above. Two control valves on the steam mains divide the building into an east zone and a west zone.

The laboratory addition and half of the first floor are served by a spit system air conditioning unit. The unit, operating with 100% outdoor air, has an electric preheat coil, steam reheat, steam humidification, and direct expansion cooling. Two pad mounted condensing units sit just outside the addition. The lab has localized exhaust, including a fume hood. Several roof mounted exhaust fans serve the remainder of the building. Window air conditioners are used in various rooms throughout the building. Two unit ventilators serve the basement.

Manual control of steam radiators requires frequent occupant attention. Some of the steam valves are in poor condition and get stuck open or closed. Most of the areas have no fresh air ventilation

The air handler serving the dental lab and medical supply areas of the first floor uses 100% outside air regardless of exhaust fan operation and is very energy inefficient.

#### C. West Campus

#### Land Use: Campus and Surrrounds

#### Existing Development:

For the purpose of this study, the West Campus is defined as the Capitol Hill complex (State House, State Office Building, and Cultural Building), lands bordering Capitol Park, and State controlled property on Capitol and State Streets. (*Refer to Building Location Map – West Campus*).

As defined, the area is characterized by government and municipal uses, giving way to residential and commercial districts to the north, west, and south. (Refer to Development Factors: Land Use map in East Campus section.) At campus center is Capitol Park, an open space of approximately 20 acres leading from the State House east to the Kennebec River. A City-owned recreation and sports complex abuts the southeast end of the park, extending the feel of open space south along the river.

The area immediately north of the State House on State Street is comprised largely of historic structures including the Blaine and Gannett Houses. West of Sewall Street on Capitol Street is the Maine Department of Transportation garage facility. A small pocket of residential development lies between the Capitol Hill complex and Howard Hill, a large undeveloped and wooded preserve to the west.

Because of the concentration of state employees, the area rivals the downtown central business district in density.

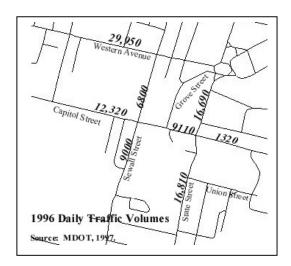
#### Zoning and Regulatory Conditions:

The Campus lies within the Institutional / Business / Professional Subdistrict (BP) of the Capitol-Commerce District. (*Refer to Development Factors: Regulatory in East Campus section*). The area is bordered to the north and south by Local Business District (CB), Regional Business District (CC), and Kennebec Business District 2 (KBD2). In contrast, the area to the southeast is Low Density Residential (RA).

#### Circulation: Pedestrian/vehicular Traffic, Roads, Parking

#### Traffic:

Primary access routes to the West Campus are State Street from the north and south, Capitol Street from the west and Sewall Street from the north and south. Existing traffic



volumes are shown at right. As described above, traffic volumes are forecasted to grow considerably (25% to 50%) on West Campus roads during the period from 1995 to 2015 according to forecasts prepared by the Maine DOT for the Third Bridge Study.

Implications of this traffic growth on the Master Planning process are that without increases in traffic capacity at gateway intersections, traffic conditions will degrade further at the State Street/Capitol Street and Capitol Street/Sewall Street intersections. Increasing intersection capacity (increasing the number of through and/or turning lanes) increases the size of the intersection and can further decrease the pedestrian friendliness of roads and intersections, counter to one of the goals of the master plan.

#### Pedestrian Circulation:

Pedestrian access to the West Campus is provided along and across City streets. Typical facilities include a bituminous sidewalk directly adjacent to the roadway/curb. Brick sidewalks are provided along portions of Capitol Street and State Street. Key findings from this analysis are:

- Poor pedestrian connections from within parking lots to buildings and streets;
- Poor pedestrian accommodations along streets, generally with a bituminous sidewalk directly adjacent to the curb;
- No pedestrian-scaled lighting along streets;
- Lighting within parking areas is poor;
- On Sewall and Grove Streets, sidewalks are provided on only one side of the street;
- Pedestrian crossings at signalized intersections are unfriendly (Sewall Street/Capitol Street, State Street/Capitol Street, State Street/Union Street);
- Pedestrian crossings across Western Avenue are poor; and,
- Crossing of Capitol Street at Grove Street needs improvement.

At the West Campus, on-campus pedestrian circulation will improve with construction projects underway at the State House and State Office Building.

#### Parking:

Parking facilities on the West Campus are composed of a combination of large surface lots, dispersed small surface lots and a medium-sized parking garage (443 spaces).

Most of the surface lots are in fair to poor condition. Typical conditions of the lots are:

- Little or no landscaping and buffering of the lot from the street;
- Fair pavement condition with several lots unpaved;
- Lack of signage to direct visitors to appropriate parking locations;
- Lack of pedestrian connections within and from lots to destinations;
- Poor or no lighting.

Demand for parking at the West Campus varies widely due to the nature of the Legislature's sessions. Typically, the Legislature is in session for nine months over a two year period. Recent experience shows that this time period is extending due to Committee meetings and hearings. Estimates for the need for visitor parking during the Legislative session are 200-300 parking spaces (BGS and Capitol Security) for visitors and those testifying at legislative hearings. This totals an approximate peak of 400-500 spaces above 'normal' demand when the Legislature is not in session (Legislators and the public/visitors).

The traffic and parking consultant for the MPC determined that there were approximately 2332 parking spaces for 2482 employees on the West Campus, including 188 Legislators (assuming the expected occupancy of the renovated State House and State Office Building) in this same area (excluding Executive Branch employees).

#### Environment

#### Landscape Character:

The West Campus is located on the west side of the Kennebec River and shares similar features with the East Campus in terms of character and natural features. Though more built up, the West Campus shares some of the pastoral feel of its counterpart across the river.

The most significant elements of the landscape character of the West Campus are Capitol Park and the grounds of the State House, both originally designed by Frederick Law Olmsted. Although Olmsted's original designs were never fully-implemented, enough remains from those aspects that were completed to be readily associated with him and to have acquired considerable historical significance. The trees of Capitol Park contribute to and frame views from and to the State House. Weston's Hill, the granite knob on which the State House sits, is itself a prominent natural feature, allowing the Capitol to appropriately dominate the Kennebec Valley and affording views of the building from south of Hallowell to well north of Augusta along the eastern riverbank.

The river itself must be considered the dominant natural feature, although it is not highly visible from the West Campus due to the trees that line its banks and the fact that its waters are a good distance below the lowest elevation of Capitol Park. It can be seen when the leaves are off the trees, and from some of the higher elevations of the West Campus, such as the portico of the State House.

#### Natural Features

Winds: Though still subject to the areas prevailing wind patterns, the eastern orientation of the campus and the rising land to the west (Howard Hill and vicinity) provide some shelter from winter winds. (*Refer to Development Factors – Natural in East Campus section*)

#### *Solar Orientation*:

The east-southeast orientation of the West Campus is well suited to take advantage of solar gain. Proximity of development in the area, however, may create more shaded conditions.

#### Wetlands:

No wetlands occur in the study area. A perennial stream, however, runs behind the Cultural Building from the northwest to the southeast. Large portions of the Capitol Hill Complex drain into the stream, which has been placed in a culvert in the vicinity of the Public Utilities Commission Building. The stream joins the Kennebec River at the municipal sewage treatment facility.

#### Flood Plain:

The 100 year flood plain occupies a very narrow band along the Kennebec River edge.

#### Vegetation:

Existing vegetation occurs in masses located primarily along the river corridor or as individual specimens along streets or in landscape locations. A significant mass of existing vegetation covers the Howard Hill area and forms a green backdrop to the State House. There are Remnants of an old arboretum constructed by the Civilian Conservation Corps and other aging specimens in the Capitol Park and Capitol Hill area. Masses of overgrown vegetation flank the river.

#### Soils:

Soils information for the area was obtained from the medium intensity study "Soil Survey of Kennebec County Maine" (USDS Soil Conservation Service, August 1978). In general, the area lies within the Buxton-Scio-Scantic soils association. The eastern portion of the campus, in the vicinity of Capitol Park, is made up of Scio very fine sandy loam, 3% - 8% slopes (SkB designation). This soil type is characterized as being deep and moderately well drained, with potentially high ground water and high potential frost action. The Capitol Hill area lies in an area designated "C.F." (cut and fill). This is land that has been heavily constructed upon, to the extent that the original soil types have been permanently modified through earth moving activities. The area north and west of Capitol Hill is made up of Buxton silt loam, 3% - 8% slopes, eroded. This soil type is characterized by deep, moderately well to poorly drained, potentially high ground water and high potential frost action.

Historically, ledge has been encountered in construction.

#### Views:

Significant panoramic views exist from points on both sides of the Kennebec River where elevation and breaks between structures and vegetation guide the viewer's eye. Vistas of the East Campus are framed by Capitol Park from the steps of the State House, and from all upper levels of the building.

Shorter-range viewpoints occur north and south of the Capitol along State Street. Long views to the Capitol occur at the west end of Capitol Street soon after it turns off Western Avenue. Long views up the Kennebec River to the Capitol can be found as far south as Hallowell.

In general, there is a less urban "feel" to the West Campus as compared to the more central, commercial and office areas of the city. This is due primarily to a lesser density of building and more and larger concentrations of open space.

#### Infrastructure – Utilities:

#### Water Service:

Water service is supplied to the West Campus by the Augusta Water District system. Water supply mains are available for use in the major streets within the Campus area, including a 12-inch line in Capitol and Sewell Streets, and 6-inch and 8-inch lines in State and Union Streets.

Water supply service to existing buildings may require upgrade to handle current fire suppression system requirements.

#### Sanitary and Stormwater Sewer Service:

Separated sanitary and stormwater services are available throughout the West Campus. The Augusta Sanitary District manages and administers both systems, and has adequate capacity at its treatment plant for projected flows from increased development. Both systems on Capitol Hill are aging, however, and require upgrade and replacement in conjunction with new construction. A major (60") storm sewer interceptor is located immediately north of the Capitol Street Parking Garage. The line comes in from Sewall Street, passes behind the garage and angles towards Capitol Street along Grove Street. From there, it continues downhill to the river.

The West Campus does not lie with the watershed of a great pond, water body most at risk, or a threatened area of a watershed, as defined in the Maine Stormwater Management Law. New development will require management and control of the quantity of new stormwater flows. Control of stormwater quality will need to be consistent with the Stormwater Law for removal of Total Suspended Solids (TSS). New construction must meet the standards of the Maine Erosion and Sedimentation Control Handbook for Construction: Best Management Practices (Cumberland County Soil and Water Conservation District and Maine Department of Environmental Protection, Latest Edition).

#### HVAC, Power and Communications:

All power and communications services are available for proposed development. Services are underground in defined street locations.

HVAC is provided by individual systems in each building.



- 1. STATE HOUSE
- 2. STATE OFFICE BUILDING
- 3. CULTURAL BUILDING
- 4. 242 STATE STREET (PUBLIC UTILITIES COMMISSION)
- 5. EDUCATION BUILDING
- 6. 221 STATE STREET (DHS)
- 7. 20 UNION ST. (DEPT. OF LABOR)
- 8. MAINTENANCE BUILDING
- 9. DOT BUILDING
- 10. DASHLAGER HOUSE (HISTORIC PRESERVATION)
- 11. DISTRICT COURT
- 12. NEW DOT SIGN SHOP BUILDING
- 13. DOT TRANSPORT SERVICES
- 14. NASH SCHOOL (SECRETARY OF STATE)
- 15. DOT WAREHOUSE
- 16. DOT SIGN & TIRE SHOP
- 17. GANNETT HOUSE (STATE PLANNING OFFICE)
- 18. McLEAN HOUSE
- 19. MERRILL & SMITH HOUSE (STATE PLANNING OFFICE)
- 20. BLAINE HOUSE
- 21. STAFF HOUSE/BLAINE HOUSE GARAGE
- 22. 8 FEDERAL STREET (INLAND FISHERIES & WILDLIFE)



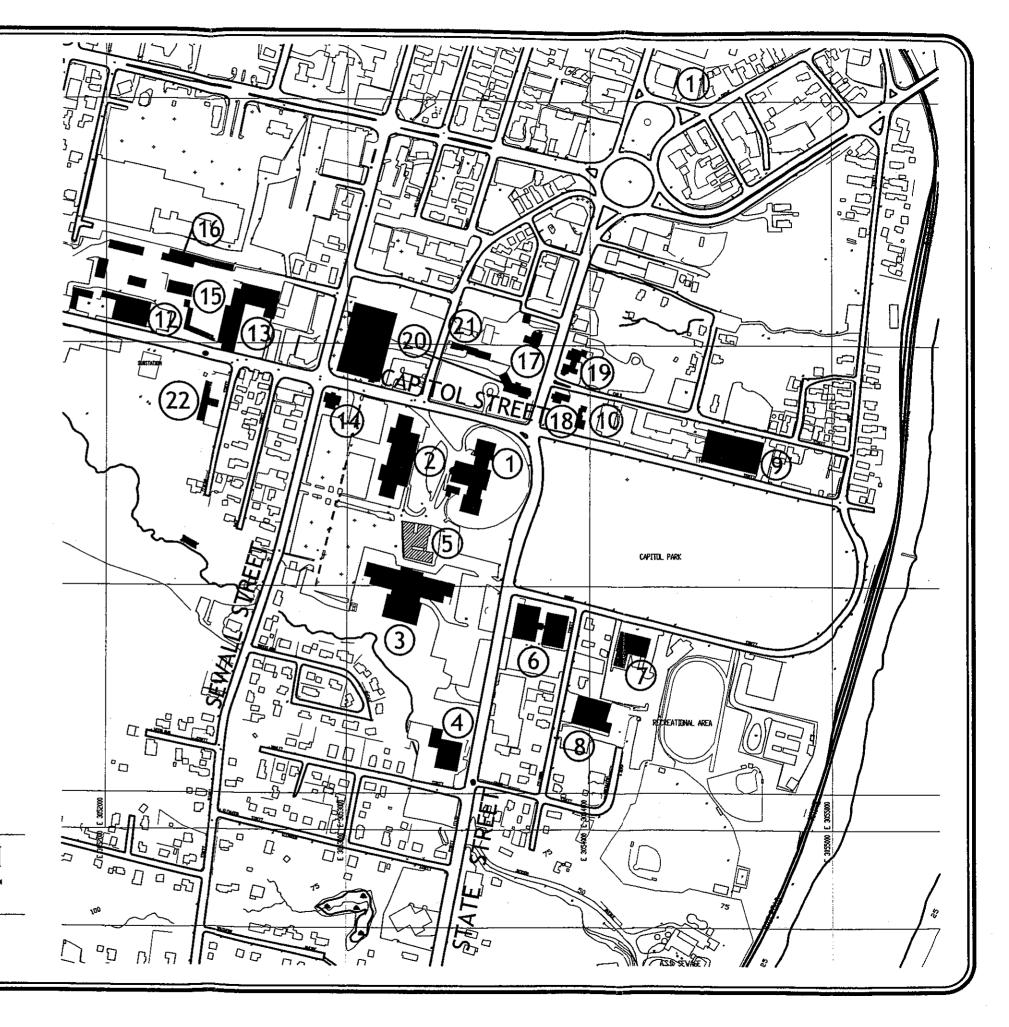
ARCHITECTUR ENGINEERING PLANNING

# AUGUSTA STATE FACILITIES MASTER PLAN

AUGUSTA, MAINE

## **BUILDING LOCATION**MAP - CAMPUS WEST

14 MARCH 2000



#### **Buildings: Architectural Evaluations**

8 Federal Street

Location: 8 Federal Street

Inventory number: AUG123 Gross area: 11,252 sf

Primary occupant/use: Department of Conservation/offices,

storage, and vehicular storage

The two-story wood-frame building on Howard Hill at 8 Federal Street, on the corner of Capitol Street and overlooking the Capitol Complex, is in good condition. But it has been added to and altered many times so that the interior is convoluted and, in some instances, not up to life safety and barrier-free access requirements.

#### 20 Union Street

Location: 20 Union Street, on Capitol Park

south

Inventory number: AUG023 Gross area: 40,362 sf

Primary occupant/use: Department of Labor/offices

The Department of Labor headquarters building sits on a prime site along Union Street fronting on Capitol Park and city-owned open space. The original building was designed by Harriman Associates and constructed in 1961 in a nondescript, modern style. Exterior materials consist of brick, granite panels, concrete block, and aluminum Harriman Associates also designed a 1991 windows. addition, and the building has been subject to several renovation projects since then. It was well-built and remains in good condition, though its layout poses some barriers to contemporary office use and DOL management goals, and its mechanical and electrical systems continue to require upgrading. It is not currently accessible. It has surface parking adjacent to it, but additional parking is needed to meet current requirements. The building is partially-accessible.

#### 221 State Street

Location: 221 State St., corner at Capitol Street

Inventory number: AUG039 Gross area: 79,200 sf

Primary occupant/use:DHS/offices and laboratories

This facility consists of a 3-story building constructed in the early 1950's, connected to a two-story-with-basement building constructed in the 1960's. The buildings occupy a strategic location at the corner of State Street and Union Street at the southwest corner of Capitol Park. The earlier building houses office functions, while the later structure contains office use on the upper floor and public health laboratories on the lower two floors. Both buildings are in reasonably good condition, but both require substantial renovation to continue serving in their present functions. The question can be asked as to whether the laboratory spaces meet contemporary requirements. Until recently, the occupants have been able to adapt to changing needs, but consideration should be given to the design of a new facility, especially considering the agency's prediction that its public health role will be expanding significantly with time. In addition, parking is a problem at the site.

#### 242 State Street

Location: 242 State Street

Inventory number: AUG058 Gross area: 26,800 sf

Primary occupant/use: Public Utilities Commission, Ethics

Commission/office and meeting

space

This non-descript brick building has been renovated several times and expanded substantially. Though it now houses two agencies, with the PUC taking up the lion's share of the space, it may ultimately be a one-tenant building. It occupies a prime location just south of the State House on State Street, at the foot of a slope leading to the Cultural Building site. The building was constructed in the 1920's, and was extensively renovated in 1986. It has a good-sized parking lot on-site with a larger parking area located across Manley Street.

#### Burton Cross Office Building

Location: 9 Jackson Street

Inventory number: AUG043 Gross area: 233,814

Primary occupant/use: Executive and Legislative Branches/

offices and hearing rooms, services

Work on the State Office Building began in June, 1954, and was completed in the Fall of 1956. The building was

constructed as a result of a twenty-year shortage of space in the State House and was intended to be built with "Maine granite and glazed brick to harmonize with the general shape and layout of the Capitol" (*Daily Kennebec Journal*, 2/22/49).

The building was constructed by Joseph Rugo of Boston, general contractor, according to the design of architects Miller & Beal of Portland, in conjunction with Desmond & Lord of Boston. G. Henri Desmond, one of the principals of Desmond & Lord, was responsible for the major addition/ renovation of 1909-1911 that transformed the State House from the original Greek Revival temple-form Bullfinch structure into the building that we know today

The Lewiston Daily Sun & Evening Journal noted some of the building's modern conveniences as including "a lobby of polished granite, two automatic 'electric' elevators, movable interoffice partitions, separate telephone and power connections for each desk, a tunnel connecting the building with the State House, aluminum framed windows, a blower carrying fresh air to each room, a cafeteria seating 175 persons and containing \$30,000 worth of stainless steel equipment" (1/30/57).

The building was considered state-of-the-art at the time, set up for both large, open office areas to be furnished with free-standing steel desks; and partitioned areas for smaller work groups, managers and specialized work spaces. The large, open areas were subdivided using a new "demountable" partition manufactured by the Hauserman Co.. These partitions did not reach the ceiling, and rested on the floor with minimal attachments, thereby being easily dismantled, moved, and reinstalled in a different configuration. A sophisticated under-floor distribution system allowed for the individual phone and power hookups mentioned in the newspaper account.

The exterior appearance of the building is resolutely simple and austere, though its undulating, multi-faceted facades belie its size. At the interior, the only space with any pretense is the elevator lobby on the second floor (the public entrance level), which features terrazzo floors and granite-paneled walls.

The building is currently undergoing a thorough renovation, which is scheduled for completion in 2001.

Cultural Building

Location: Capitol Complex

Inventory number: AUG065 Gross area: 168,000 sf

Primary occupant/use: State Library, State Museum, State

Archives

In 1965, as a result of citizen initiatives and legislative support, a Legislative Museum Study Committee submitted a report recommending the construction of a new State Museum, which was also to house the State Archives and State Library. The Committee commissioned a Building Program, which was prepared by directors of successful museums in Boston and Denver.

The result of this effort was the design and construction of the Maine State Cultural Building in 1967-69. A modern structure, designed by Walker O. Cain & Associates, museum specialists based in New York City, was erected to the south of the other three Capitol Complex buildings. The purely modern design was organized around a clear, three-part separation of the three building functions around a central, open courtyard.

The building was planned to celebrate outdoor as well as interior space. The original drawings show a large entrance court at the main entrance level (the third floor) with a sunken light court at its center admitting daylight to the main library reading room below (2<sup>nd</sup> floor). They also showed a pair of symmetrical monumental stairways leading from the east and west sides of the entrance court to a roof garden above the portions of the building that rose only one level above the main entrance grade. It appears the architects generated these ideas for use on another museum in a more hospitable climate, as the rooftop gardens (and the symmetrical stairs) were never installed. and the library light court was a continuous source of leaks, and was thus roofed over (as was the entire entrance court) with a modern granite and glass enclosure in the late 1980's.

<u>Department of Transportation Building</u>

Location: 1 Child Street
Inventory number: AUG038
Gross area: 115,620 sf

Primary occupant/use:DOT offices and services

The 1975 DOT Building is one of Maine's best examples of an open-plan "Modern" office building of the mainstream modern architectural movement of the 1960's and 1970's. It was designed by one of the United States' foremost architectural firms of the period, The Architects Collaborative (known as TAC) of Cambridge, The original drawings and design were Massachusetts. quite eloquent, and its interior floor plans innovative; but the construction process did not go smoothly and the building was not constructed entirely to plans and specifications. As a result, the building has experienced some significant durability problems. However, it provided a flexible and adaptable working environment that has weathered many changes in administration and management/work styles. The building occupies a key location on the north edge of Capitol Park, and is the closest major State-owned building to downtown Augusta.

#### **DOT Sign and Tire Shops**

Location: DOT Motor Transport, Capitol Street

Inventory number: AUG028
Gross area: Not available
Primary occupant/use:Department of

Transportation/storage and sign

fabrication

This is a two-story wood-frame building at the rear of the Capitol Street DOT Motor Transport complex. It is approximately 80 years old and is in poor condition. It is of no historical or architectural significance.

#### DOT Warehouse

Location: DOT Motor Transport, Capitol Street

Inventory number: AUG027 Gross area: 7,812 sf

Primary occupant/use: Department of Transportation /

storage

This prefabricated metal building was constructed in 1975 on a portion of the DOT Motor Transport complex on

Capitol Street to the west of the State House. It has highbay space with two wood mezzanines and is used for storage.

#### Gannett House

Location: 184 State Street

Inventory number: AUG040 Gross area: 7,735 sf

Primary occupant/use: State Planning Office/offices

This landmark former residence is used as office and conference space by the State Planning Office. building is not suitable for the high-intensity office use presently housed there, and the SPO requires so much more space that it occupies two additional former residences directly across State Street. The building has been subject to some renovation in an attempt to house as many employees as possible in basement and attic space. A recent study looked at major exterior building elements such as the stucco wall surface and clay tile roof, both of which are A complete renovation/expansion in need of repair. scheme was developed several years ago but was not executed due to lack of funding. The site includes the former garage (AUG127) that is currently being used by BGS for storage. The Gannett House is prominently located on State Street next to the Blaine House, and is one of a group of historic residences clustered at the corner of State and Capitol streets that are deserving of historic district designation and protection to provide a dignified approach to the Capitol Complex from the north.

#### Gannett House Garage

Location: 184 State Street (rear)

Inventory number: AUG127 Gross area: 1,500 sf

Primary occpuant/use:BGS/storage of maintenance

equipment

The Gannett House Garage (AUG127), the former carriage house, has three floors, two of them accessible at grade, with about 1,500 sf. It is in fair condition but is architecturally significant and deserving of preservation due to its design and construction, which coordinate with the Gannett House and result in a distinctive outbuilding. It is currently used by BGS for storage.

#### Gage-McLean House

Location: 193 State Street

Inventory number: AUG056 Gross area: 5,645 sf

Primary occupant/use: Public Advocate, Governor's Office

This handsome Italianate former residence, built in the 1860's, now used as office space by state agencies, sits as part of a small group of historic houses at the corners of State Street and Capitol Street (other houses include the Blaine House and the Gannett House). It has suffered the conversion to office use gracefully but is overcrowded and overused. The house has many notable interior and exterior features that remain in evidence. The building is in generally good condition but is in need of exterior restoration and some interior rehabilitation.

#### Gage-Lemont House

Location: 55 Capitol Street

Inventory number: AUG010 Gross area: 7,348 sf

Primary occpuant/use: Maine Historic Preservation

Commission / Maine Arts

Commission

The Gage-Lemont House was constructed in 1845 by the same person who built the Gage-McLean House next door. Designed as a duplex, it may have been built as a speculative venture. The house was acquired by the State in 1975. An early twentieth-century garage to the rear was replaced by a one-and-one-half story gabled addition constructed in 1989 to provide office, storage and laboratory space. The house has been occupied by the Maine Historic Preservation Commission and the Maine Arts Commission for most of its period of State Ownership. It has been relatively well maintained and was substantially renovated in 1989, though it retains many of its period details.

#### Merrill House

Location: 189 State Street

Inventory number: AUG120 Gross area: 4,024 sf

Primary occupant/use: State Planning Office/office and

meeting space

The Merrill House is a former residence now one of three contiguous houses occupied by the offices of the State Planning Office. The house is physically connected to the Smith House, another historic residence, next door. The Smith, Merrill, and Gannett Houses, all occupied by the SPO, make up three of the six historic houses grouped along State and Capitol Streets adjacent to the State House. This group of residences serves as a dignified and attractive approach to the Capitol Complex and as a reminder of the formerly grand domestic nature of State Street in the vicinity of the State House. The preservation of the Merrill and Smith houses should be a high priority as they, along with the Gannett House, the Blaine House, the MacLean House and the Dashlager House, represent a significant historic district in Augusta.

#### Motor Transport Services

Location: 105 Capitol Street

Inventory number: AUG093 Gross area: 37,540 sf

Primary occupant/use: Department of Transportation/Motor

**Transport Services** 

This industrial-type building constructed in the 1920's is typical of industrial buildings of its time in featuring an exposed concrete structural frame, pitched steel-truss roofs, large industrial windows, monitor skylights, and large-span interior spaces. While the building has been altered through the replacement of its original expansive steel sash with infill panels and modern residentially-scaled windows, one can still read its original rugged character on the exterior. The interior houses a variety of heavy machinery. The building has been well-maintained. The upper levels contain offices, lounge space and storage, while the lower level contains shops and warehouse space. occupies part of a significant site in an old granite quarry on Capitol Street. It houses offices on its upper level and shops and warehouse space at the lower level. The site is a central one, with potential for substantial parking at grade and/or under new construction due to the topography of the old quarry in which it is located. There are also fine views of the Capitol and the Kennebec Valley from the site.

Nash School

Location: 103 Sewell Street

Inventory number: AUG042 Gross area: 8,226 sf

Primary occupant/use:Secretary of State/offices

This historic former school was recently adapted for office use. Its brick exterior walls and recently-installed asphalt roof appear to be in good condtion. Both the interior and the exterior retain many significant original features. It occupies a prominent, though crowded, site at the southeast corner of Capitol and Sewell Streets, across a parking lot from the State Office Building. The entry/exit arrangement is awkward, with the original main entrance on Capitol Street used only as an exit, and the vestibule used as storage.

#### New Sign Shop

Location: Capitol Street, MDOT Complex

Inventory number: AUG057 Gross area: 18,760 sf

Primary occupant/use:DOT/sign fabrication

This metal pre-engineered industrial-type storage building occupies part of a significant site in an old granite quarry on Capitol Street. The largest block of the building is high-bay shop space. Along the street side is a one-story office addition faced with brick on the Capitol Street elevation. Another one-story garage/storage wing is on the opposite side. Building condition is generally good, but there is a history of roof leaks.

#### <u>Smith House</u>

Location: 187 State Street

Inventory number: AUG026 Gross area: 4,571 sf

Primary occupant/use: State Planning Office/offices

The Smith House is one of three State Street houses occupied by the offices of the State Planning Office. Although the house has been extensively renovated inside and out, it has some architectural and historical significance and contributes to the group of older former residences that line State Street between Capitol Street and Glendon Street. The interior renovations have made the building usable for office space, but the fit is not a comfortable one.

Overcrowding, poor lighting and heating/ventilation, accessibility and code issues, and technology infrastructure problems all suggest that the house is not particularly well-suited for its current use. The Smith House is physically connected to the Merrill House next door, but is across the street from the Gannett House, the third former dwelling occupied by the SPO. Thus intradepartmental meetings and communications frequently require SPO employees to cross State Street at mid-block, a dangerous and inconvenient situation.

#### State House

Location: 210 State Street at Capitol Park

Inventory number: AUG066 Gross area: 109,884 sf

Primary occupant/use: Legislature, Legislative Support,

State Law Library, Governor's Office/office and meeting space

Weston's Hill, was selected as the location for Maine's first permanent public building, the new State House, in 1823 as a committee appointed by Governor Parris decided to relocate the young State government from Portland to Augusta. In 1828, plans for the new State House were solicited from Charles Bulfinch, one of the foremost architects in the U. S. (other Bulfinch designs included the original United States Capitol in Washington, and the Massachusetts State House); and the inaugural session of the Legislature occurred in the new State House in January, 1832.

The Capitol was soon found too small, however, and several minor renovations undertaken over the period of 1850-1891 were designed to provide additional space. These modifications failed to solve the space problems of the growing government; and in 1867, and again in 1884, major additions were proposed, but neither was realized.

By 1890, however, the space shortfall had gotten so severe that an addition to the State House finally was approved. The west wing, designed by Boston architects Brigham & Spofford, was completed in 1891 and was carefully drawn to gracefully compliment the original Bulfinch building.

The expanded building represented a compromise, however, and even with the new space, some space needs

went unanswered. Thus another series of less ambitious renovation projects was undertaken during the period 1901-1908, under the direction of Portland architect John Calvin Stevens. These projects did not result in any newlyconstructed space, but represented improvements and corrections of existing spaces and systems.

The need for space soon reached a critical level again to the point that the largest expansion project was executed during the period 1909-1911. Boston architect G. Henri Desmond won a national competition for a major expansion and rehabilitation of the State House. His plan called for enveloping the Bulfinch structure with a new, much larger Capitol. The original dome and roof, north and south end walls, and original interior elements were removed in order to add new north and south wings and totally reconfigure interior spaces. In addition, new space was created by lowering the grade so that windows could be installed at the basement level; and a new parapet wall was installed at the roof so that the roof could be raised and a new 4th floor inserted. As the crowning achievement, a new steel and concrete dome rising 185 feet was erected.

The State House is currently undergoing a multi-phase restoration/rehabilitation which, in context with the renovation of the State Office Building, will allow most of the original grandeur of the Capitol as it was in 1911 to be recovered.

#### Other Locations

#### Stevens School

The Stevens School Campus lies within the Town of Hallowell, south of Augusta. The approximately 58-acre property is situated west of the town center on the north side of Winthrop Street. Located just below the rim of the Kennebec River Valley, the site is steeply sloping to the south and west

The Stevens School was constructed as a juvenile detention facility and consists of several brick institutional buildings dating from the early 1900's, with a scattering of newer buildings constructed in the 1950's and '60's. There are now 14 structures ranging from large, three-story brick and granite buildings to former residences and wood-frame garages.

As newer facilities were constructed elsewhere in the State for the detention and rehabilitation of juveniles, the Stevens Campus buildings were converted to other uses, mostly for State offices. Several State agencies are now located there, including units of the Department of Labor, the Department of Corrections, and the Department of Marine Resources.

Most of the buildings are in good repair, though the oldest and most architecturally-significant building, the Erskine Building, now vacant, has not been maintained and is worthy of and in need of preservation.

The property is divided almost in half (refer to the Stevens Campus Location Plan), with the southern half given over to development by the Stevens School, and the northern half being undeveloped.

The site is served by Town utilities.

#### **Buildings**

#### Administration Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG087 Gross area: 6,219 sf

Primary occupant/use: Department of Conservation &

Department of Marine Resources/offices



### **LEGEND**

- 1. HAYDEN HOUSE (KENN VALLEY MENTAL HEALTH)
- 2. FLAGG / DUMMER BUILDING (DEPARTMENT OF AUDIT)
- 3. CLEVELAND BUILDING (MAINE HUMAN RIGHTS COMMISSION)
- 4. ERSKINE HALL STORAGE
- 5. STEVENS BUILDING
- 6. 89 WINTHROP STREET
- 7. CENTRAL BUILDING (DEPARTMENT OF LABOR)
- 8. BOILER ROOM
- 9. ADMINISTRATION BUILDING (MARINE RESOURCES & CONSERVATION REGIONAL)
- 10. BAKER BUILDING (MARINE RESOURCES)
- 11. REED AUDITORIUM (MAIL & PRINTING (DAFS))
- 12. PRE RELEASE GARAGE
- 13. 61 WINTHROP STREET (VACANT)
- 14. WHITE COTTAGE (DEPARTMENT OF LABOR)



ARCH TECTURE ENG NEERING PLANNING

Augusta State Facilities Master Plan

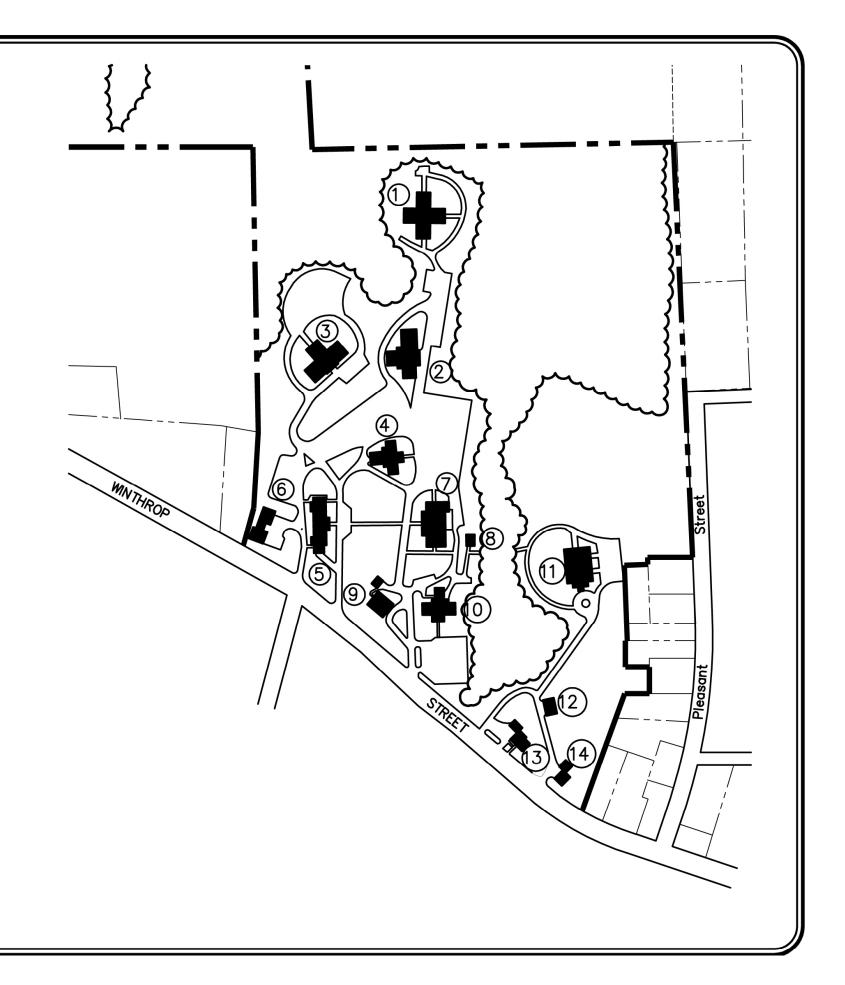
Augusta, Maine

BUILDING LOCATION

MAP - STEVENS SCHOOL

CAMPUS

**MARCH 2001** 



The former Stevens School Administration Building occupies a prominent site on the hillside at the main entrance to the campus. The Greek Revival building

Baker Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG089 Gross area: 18,536 sf

Primary occupant/use: Department of Marine

Resources/offices

Situated on the prow of a hill with fine views of the Kennebec and the buildings of Hallowell, the Baker Building is one of the historically-significant original Stevens School buildings. It needs rehabilitation, especially at the interior; and has some expansion potential. Parking is a problem on the campus now.

Central Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG094 Gross area: 33,785 sf

Primary occupant/use: Department of Labor/offices,

meeting space

This handsome brick building is one of the older, more significant Stevens School buildings. It has been extensively renovated on the interior for three DOL bureaus. The exterior, and to a more limited extent, the interior, require renovation. Again, parking needs would need to be addressed if expansion or increased intensity of use is proposed.

Cleveland Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG095 Gross area: 6,420 sf

Primary occupant/use: Maine Human Rights Commission/

offices

The Cleveland Building is a stylistic twin to the Flagg Drummer Building, with generic brick/CMU bearing walls, shallow-pitch wood truss roofs, and residential-type windows. White wood trim and columned porticos at the entrances are attempts to make a low-slung one-story building relate to the Colonial Revival architecture of the more significant older buildings on campus. Built in 1967 to house Stevens School wards, the building's narrow double-loaded corridors and small dorm rooms have not adapted well to office use. Although generally well-maintained, the building suffers from problems with windows, tight quarters, and mechanical systems which have made the building unpopular with its occupants. The building has no architectural or historical significance.

#### Erskine Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG097 Gross area: 19,296 sf Primary occupant/use:vacant/offices

The Erskine Building is the oldest, and architecturally most significant building on the Stevens Campus. It is currently vacant and reportedly has been condemned by the local building authority. A quick architectural survey indicated that the building is restorable, and could potentially be expanded.

#### 61 Winthrop Street

Location: Stevens School Campus, Hallowell

Inventory number: AUG098 Gross area: 3,513 sf Primary occupant/use:vacant

61 Winthrop Street, on the edge of the Stevens School complex, is within this Hallowell National Register Historic District and, as the birthplace of well-known 19<sup>th</sup> century author Jacob Abbott, is of historic significance. Although altered, the Federal-style house, built circa 1808-18, retains much of its historic character.

#### Flagg-Drummer Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG099 Gross area: 8,850 sf

Primary occupant/use: Department of Audit Administration/

offices

The Flagg-Drummer Building was constructed in 1969 on the site of a demolished original Stevens School building. It is a one-story building with a low-slope gable wood-truss roof, and some colonial detailing to recall the Colonial Revival architecture of the older Stevens School buildings. The building has a simple interior, with a double-loaded corridor feeding former dorm rooms, now offices, on either side. It has been well-maintained and is in generally good condition. It is of no historic or architectural importance.

#### **Garage**

Location: Stevens School Campus, Hallowell

Inventory number: AUG088 Gross area: 450 sf

Primary occupant/use: Department of Conservation &

Department of Marine Resources/

storage

This wood-frame garage of uncertain vintage is of no historic or architectural interest. It is used for the storage of vehicles and boats by the primary occupants listed above.

#### Hayden Hall

Location: Stevens School Campus, Hallowell

Inventory number: AUG100 Gross area: 5,985 sf

Primary occupant/use:MHMR&SA, leased to private/

residential treatment facility

This undistinguished contemporary building built in 1965 is similar in character to the Flagg-Drummer Building and Cleveland Hall. The one-story building features brick exterior walls, a low-slope wood truss gable roof, residential windows, and a portico with ersatz Colonial details. The plan is in the shape of an "X", with double loaded corridors feeding the four wings of residential rooms and support spaces. It has been well-maintained and in generally good condition. It is relatively remote from the historic main campus area, and is used by a local mental health service provider. The building has no historic or architectural importance.

#### <u>Pre-Release Garage</u>

Location: Stevens School Campus, Hallowell

Inventory number: AUG107 Gross area: 800 sf

Primary occupant/use: Department of Corrections/vehicle

storage

The Pre-Release Garage is a cinder-block three-bay flat-roof structure of no historic or architectural significance.

#### Reed Auditorium

Location: Stevens School Campus, Hallowell

Inventory number: AUG104 Gross area: 13,419 sf

Primary occupant/use: DAFS, Central Post Office & Print

Shop

This former gym for Stevens School was designed by Bunker & Savage and constructed in 1955. It was converted to a print shop and postal operation in 1992. It features flat roofed high-bay auditorium space and separate one-story support spaces. Former Kalwall openings have been infilled in some cases with solid wall sections and small, residential-scaled windows. Much of the theatrical and gym components remain in place. The building has been well-maintained.

#### Stevens Building

Location: Stevens School Campus, Hallowell

Inventory number: AUG105 Gross area: 17,841 sf Primary occupant/use:Department of

Corrections/prerelease center

This classical revival building was constructed in 1936 and served as a dormitory for the Stevens School. It now functions as a pre-release center for the Department of Corrections. It needs to be renovated, and could support small additions that could provide accessibility, new entrances, and means of egress improvements. It occupies an important position on the campus and should be considered a significant building along with those it faces across the central quadrangle.

#### Supervisor's House

Location: Stevens School Campus, Hallowell

Inventory number: AUG101
Gross area: 2,400 sf
Primary occupant/use: vacant/offices

This handsome Federal-style residence was formerly occupied by the Maine Publicity Bureau. It was in poor condition at the time of the inventory, and was the subject

of some controversy three years ago when town residents questioned the State's intentions regarding the building. It has been determined eligible for the National Register of Historic Places in an effort to focus attention on it. The building is in poor condition, and the interior has been gutted. Much of its original exterior detail remains intact, as do some of the most important interior trim elements.

#### White Cottage

Location: Stevens School Campus, Hallowell

Inventory number: AUG106 Gross area: 2,128 sf

Primary occupant/use: Department of Labor/offices and

meeting space

This small bungalow-type former residence is of wood-frame construction with wood-shingled walls and shed roof. It has a more recent rear addition. It has been comfortably adapted for use by a small state agency and is in good condition.

#### Downtown:

The MPC defined the Augusta "Downtown" as the area's Central Business District. Located on the west side of the Kennebec River, the area is bounded by the river edge on the east, State Street on the west, Memorial Bridge to the south, and the Father Curran Bridge to the north.

The downtown is long and linear, following the river and sloping up to the west. It is where the concentration of denser urban activity lies, including activities typical in a regional service center. It includes the Kennebec Business District 1 (KBD1), Kennebec Business District 2 (KBD2), and Institutional/Business/ Professional Subdistrict (BP) zones.

As is typical of many smaller American urban centers, the Augusta downtown has suffered heavy losses to suburban development in the competition for consumer and business interest. Recent State presence in leased space in downtown buildings has provided much needed life and vitality.

Outstanding views up and down the Kennebec River corridor abound from waterfront properties and higher structures uphill.

The downtown infrastructure is capable of supplying services to proposed development. However, parking must be improved if the downtown employee population is to grow.

The State has, historically, maintained a presence in leased space in the downtown area. This presence has varied from an individual agency of a major State department housed in a storefront to the relocation of the entire Office of the Attorney General to the Key Bank Building during the rehabilitation of the Burton M. Cross Building. The Master Planning Committee considered the condition of Augusta's central business district to be of concern, and investigated the current health and vitality of the area as it evaluated the State's current and future office space needs.

While Water Street has certainly suffered economically due to the recent construction of "big box" retail centers to the west, there are signs that a comeback has begun. The Capital Riverfront Improvement District project included an examination of the downtown. The CRID project report contains several recommendations for taking advantage of the downtown's unique architectural, historical, social and natural resources.

#### Other Augusta-Area Locations

#### Anthony Avenue

The State currently leases a substantial amount of space in an office/industrial park located off routes 11 and 27, northwest of the Interstate, on Anthony Avenue. The Department of Human Services and the Department of Labor both have major facilities there in industrial buildings that have been converted to office use.

DHS houses several bureaus, some administrative and some serving the public, in a building that has been renovated several times. The department considers the Anthony Avenue location to be convenient for its customers, being close to an expressway interchange and near the Civic Center and the University of Maine at Augusta.

The Department of Labor occupies another recently-expanded and renovated Anthony Avenue building with its Augusta One Stop Career Center. DOL also cites the convenience of this location for its customers, as the

department consolidated three different customer-oriented bureaus according to the One Stop concept.

#### Gardiner

Two State agencies are housed in leased space in Gardiner. Several units of the Department of Public Safety are located in a converted retail building on Water Street; and the Department of Professional & Financial Regulations is housed in a former industrial building in a residential area on Northern Avenue.

#### 159 Hospital Street

Location: 159 Hospital Street

Inventory number: AUG122 Gross area: 2,360 sf

Primary occupant/use: Department of Conservation/offices

The Department of Conservation occupies this bungalowstyle former residence across Hospital Street from the AMHI Campus. It is in generally good condition, though occupants suffer from its close proximity to the traffic of Hospital Street.

#### Agricultural Storage, Weights and Measures

Location: Cony Road
Inventory number: AUG121
Gross area: 19,436 sf
Primary occupant/use: Department of

Agriculture/laboratory, offices, shop,

storage

This brick/concrete block warehouse facility constructed in 1964 houses storage, offices, and laboratories for the Weights and Measures and the State Dairy Board operations of the Department of Agriculture. It has been renovated, with conversion of some shop space to offices in 1970 and a new roof in 1996. It is in fair to good condition and appears to be serving its current functions well.

#### Entomology Laboratory

Location: 50 Hospital Street

Inventory number: AUG084 Gross area: 6,325 sf

Primary occupant/use: Department of Conservation/offices

and laboratory

This two wood-frame building is located near the Public Safety complex on prime real estate on Hospital Street with fine views across the river to the Capitol Complex. The residentially-styled and scaled building was constructed in the 1930's by the Civilian Conservation Corps. It was wellbuilt and has changed little since its construction, still featuring its original hinged windows, linoleum flooring, and beaded ceiling. An addition was constructed to the rear in the 1960's.

#### Entomology Garage/Storage

Location: 50 Hospital Street (rear)

Inventory number: AUG085 Gross area: 3,456 sf

Primary occupant/use: Department of Conservation/storage

The Entomology Garage is a simple two-story wood-frame structure with no inhabited spaces. It functions as a storage building for vehicles, boats, chemicals, furniture and equipment. It is unfinished, unheated, and unplumbed. The exterior is in fair condition. The building probably dates from about the same time as the Entomology Laboratory.

#### Old Liquor Warehouse

Location: 10-12 Water Street, Hallowell

Inventory number: AUG102 Gross area: 61,561 sf

Primary occupant/use:DAFS (Lottery Commission), State

Museum, State Archives, Law Library/offices, warehouse space

The Lottery Commission now occupies the office portion and a small part of the warehouse space of this utilitarian 1995 building, while the Museum, Archives, and Library use the majority of the space for processing and storage. The latter spaces were substantially renovated in 1987, while the office spaces were renovated in 1993.